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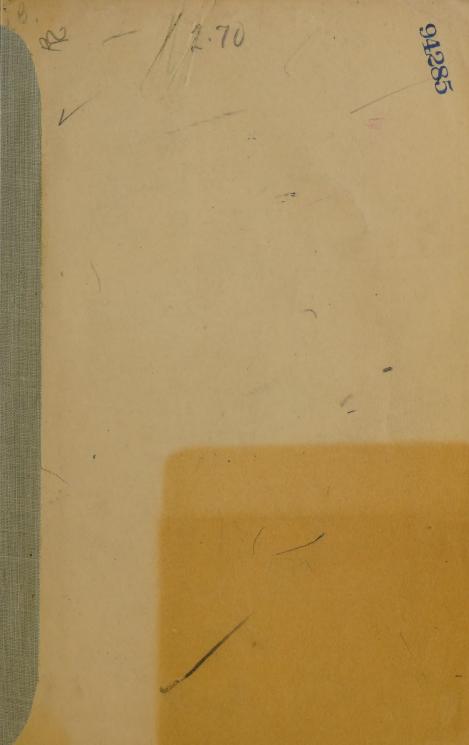
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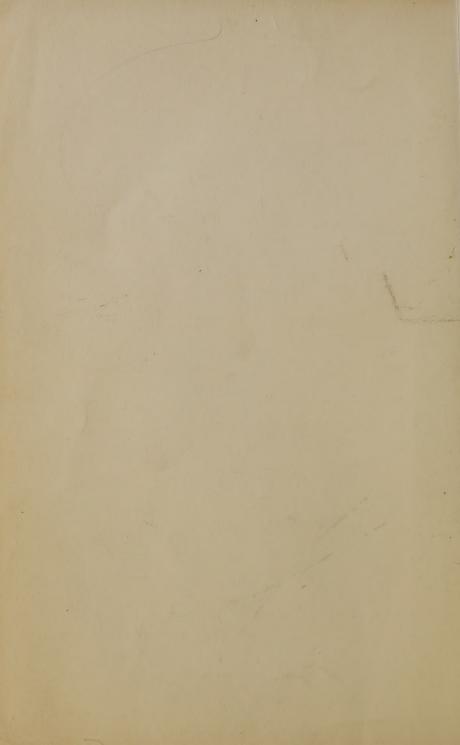
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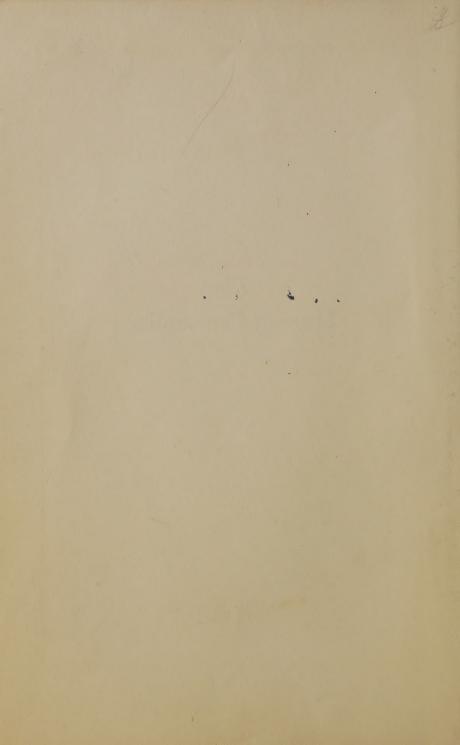








### The Human Personality



## The Human Personality

 $\begin{tabular}{ll} $by$\\ Louis Berg, M. D. \end{tabular}$ 

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1933

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### To MY MOTHER WHO MADE ALL THINGS POSSIBLE



#### . Preface

AN unfortunate habit of our times has been the carrying of specialization, so necessary in many scientific fields, into the study of the human personality. The consequence has been the subjection of man to the despotism of the various sciences and his division into many loosely related parts and functions. Biology and psychology, genetics and physiology, sociology and the medical sciences, have quarreled without end over the boundaries of the claims which they have staked out and mined in their quest of a more precise knowledge of the nature of man and the determinants of his conduct. Each in its turn has minimized, and even ridiculed, the efforts of fellow-interpreters of human nature; and each has stoutly and jealously supported its own exclusive dogmas.

This book is the expression of a reaction against such special theories and the conflict that they have caused; it has been planned and written in view of the acute need of well integrated studies of our sometimes bewilderingly complex life. The author, as an educator, a psychiatrist, and a former practicing sociologist, has long been faced by the truth that man is something more than the sum of his parts as viewed by the individual sciences. If we are to understand human life and assist in the solution of its problems, it is necessary for us to assume the attitudes of both dynamic psychology and sociology, with their emphasis upon the influence of environment and the limits of adjustment, and biology, with its emphasis upon the mechanisms of heredity. It is more than clear that human beings can-

not be merely psychologized, or sociologized, or biologized; they must be seen eclectically, as integrations—as Gestalten.

Philosophy, once the mother of sciences, was a synthesis to which all the sciences directly contributed. To this lost synthesis modern research, with its promise of a reconciliation within itself, seems gradually to be returning. Hence, in viewing the human personality as a unit, the author has looked forward to this end.

Louis Berg.

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#### Editor's Introduction

PERHAPS the most fundamental change in point of view and emphasis in modern education is in the direction away from the conception of education as a process of acquiring knowledge to that of developing a human personality. In 1861 Herbert Spencer, in an epochmaking treatise on education, raised what he regarded as a fundamental question when he inquired, "What knowledge is of most worth?" His view represented the prevailing one of the time, that knowledge was the end to be attained through education, and that when knowledge was once acquired, the behavior of the individual would conform.

We have been completely disillusioned as to the validity of knowledge in determining the behavior of an individual. Consequently today, in evaluating the educational process, we inquire in what way we may develop a personality that will function adequately as a unit in the complex social life. We therefore regard personality, which is the sum total of one's behavior, as the end of education.

This change of emphasis is expressed not only in our educational theory but in our method, in the character of the curriculum, and in the school and classroom organization, and it takes definite form in the educational literature and movements of the present time. Furthermore, as the discussion of educational questions develops, two contrasting views relating to the basis of personality development have appeared. One holds that personality is conditioned primarily by inherited factors, and the other, that it is conditioned by social situations to which the individual responds.

In general, the psychologist and psychiatrist represent the first point of view, and the sociologist, the second. There is, moreover, a growing feeling among students of education that we have, as a result of the very rapid development of psychology and perhaps the one-sided emphasis upon it, underestimated the influence of the experiences in the development of the total personality of the individual. And this aspect of the problem is receiving greater emphasis at the present time.

This book is distinctive in that it represents the sociologist's point of view, that is, the conception of the influence of experience. While the author gives due emphasis to the biological and other factors, such as the influence of the endocrine glands in the development of personality, he at the same time places much emphasis upon the influence of experience in conditioning the person and his behavior. He is therefore in line with the present-day emphasis.

No one can deny the fact that a human being is the sum total of his whole past, which includes his biological inheritance in all its essential connections and ramifications; but until recently the tendency was to place almost exclusive emphasis upon the inheritances as influencing human growth and development. A decade ago it was not unusual for educators to believe that a person's whole future depended upon the amount and quality of his intelligence. What was even more significant, they insisted that they could determine, with fair accuracy, the character and amount of intelligence an individual possessed. With this premise, then, they could predict the possible development of an individual. Not only could they foresee his future, but they could lay down, on the basis of the knowledge they believed they possessed, a plan of guidance for his conduct.

Fortunately we now look upon such an extreme view as merely a phase of our modern scientific development of education. We know now that we cannot measure intelligence with assured accuracy, and we are further sure that after we have used our best endeavors in the direction of measurement, we can know little of what the future personality is to become. That will depend upon the situations under which personality is conditioned. With this point of view clear, we are in a position to go forward in our educational endeavor with the knowledge that education in its broadest sense will play a large part in the career of the individual. This view exalts education to a high plane and places a large responsibility upon all those persons responsible for the education of the child; and those persons include all who have formal or informal contact with him. Everyone who makes a contribution to the literature or practice of effective education procedure becomes a benefactor to the race through his contribution to the modern science of education.

E. GEORGE PAYNE.



#### CHAPTER 3

#### Personality and the Body

#### What is Personality?

MAN is not born human. Rather, from cradle to grave his struggle is to become so. At birth, he is but a bundle of kicking protoplasm, unaware of the outside world and, so it seems, scarcely interested even in his own existence. However, as a mass of reflexes, instincts, undirected strivings and desires without background or reason, he gradually organizes himself under the weight and direction of his environment. Growing and developing from his beginning as a creature of undifferentiated and meaningless patterns of behavior, he experiences the conditioning of his reflexes, and attains the self-control and the reflective life that distinguish man from all other living things.

We cannot tell why we become human; the answer to such questions must be left to religion and the teleologies. But since we do know how we become human, this can be our thesis. Perhaps an understanding of this growth and development will give us some clue to aid us in becoming the kind of person we want to be instead of the one

we are.

Personality is an integrated psychophysical pattern; it is the totality of the individual formed by the action of the environment upon his hereditary potentialities. It signifies the sum total of his own and his ancestral past: his physique, his emotions, his brain patterns, and his abilities; it also

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hints at a predictable type of behavior in response to definite life situations.

Heredity describes the circle within which the individual must work his wonders; and environment attempts to square this circle. Education, climate, religion, illness, economic situations, and all the things that are man's life, shape his individuality within the radius prescribed by heredity. Through his body and mind he reacts as a total organism against life situations; and adjustment, maladjustment, failure, retreat, flight or attack may be his response. We do not see or feel his personality; but we know it through behavior, through the intelligent and emotional patterns of conduct shown. And it is these manifestations that we study when we try to discover what a personality really is.

#### Early and Modern Views of Personality

Now to be human is almost identical with being a personality—something that has always intrigued everyone. The word "personality" itself has had an evolution well worth recounting. It originated in the Greek drama, in which the word prosopon signified a mask used by a player to hide his real self; this is interesting because even today most personalities are still masks that face society rather than true selves, which are hidden beneath conventional patterns of behavior. Later, the Romans substituted the Latin word persona for the Greek prosopon; but, being somewhat changed in its suggestiveness, the Latin word came to mean the wearer rather than the mask, thus giving us the familiar phrase dramatis personae, or "cast of characters." Then, through the Middle Ages, the scholastics in turn varied the use of the word persona, finally giving it the meaning of soul, or self.

It remained for the romantic philosophers of Germany to

idealize personality and to preach its achievement as the chief good of life. Goethe sings:

Höchstes Glück der Erdenkinder, Sei nur die Persönlichkeit.

The greatest joy of earth's children Is to become a personality.

Alles könne man verlieren, Wenn man bliebe was man ist.

Man can lose everything, If he will remain what he is.

Today, rather than asking for definitions, all sciences are asking, "What makes up personality?" How may we develop it to the fullest of our capacities? Nor is science alone; indeed, all thinking men and women are asking themselves this question. Newspaper columnists write reams about it, preachers exhort congregations on how to develop it, and the dramatist and the novelist analyze it.

Why this universal fascination? Why this preoccupation of the modern mind? The answer is simple: within the domain of the personality are secreted the why's and wherefore's of human behavior, the key to the mystery of life itself. We are all a bewildered audience watching an eternal drama of adjustment and maladjustment. The characters may be our friends, our children—even ourselves, if we can look in the mirror without flinching. We know that certain individuals, like Hamlet, must fail because of an essential flaw; and that others possess saving graces which bring them through to a triumphant curtain. In a vague sort of way, even the man in the street probably realizes that—

The fault, dear Brutus, lies not in our stars, But in ourselves, that we are underlings.

Are there, then, some patterns of thinking and feeling and acting integrated in certain ways that insure happiness, and some that doom individuals to failure and misery? Are there objective criteria by which we may recognize the hero and the coward, the strong and the weak, the poet and the peasant? In short, are there personality types? Can we know them, and can we avoid or change the undesirable ones? To answer such questions, this book has been written.

#### The Organic Basis of Personality

Before we examine how modern science has approached this problem, it is of interest to look into the origins of our problem and to see how its solution has been attempted in the past. And, as with most knowledge, we find its roots in the Greeks, that remarkable people which had "no knowledge of antiquity and no antiquity of knowledge." Ever-curious Hippocrates, "Father of Medicine," believed that personality was determined by the circulation through the body of certain humours, the predominance of any one of which gave rise to a definite type of individual. He proclaimed that men were either choleric, phlegmatic, sanguine, or melancholic. This theory became known as the humoral doctrine and persisted in curious forms through the ages; at the present time, it appears as the glandular theory and seems at least to be partly vindicated.

Hippocrates was the forerunner of a school which is prominent even today and the theme of which is that the constitution and physical form of the individual are an index of what type of temperament, character, and total personality he possesses. Many centuries later Gall, a famous German anatomist, took up his teachings, thus becoming the first important modern member of this—the constitutional—school. He attempted to localize certain

traits by means of cranial elevations, or "bumps." He used the skulls of famous people whose characteristics were well known, and by reasoning backward he attempted to correlate definite deformations of the skull with individuality. But this method, which came to be called *phrenology*, led him into ludicrous errors, and the entire movement was discredited despite Gall's scientific repute. Today "bumpology" has a poor reputation and is practiced only by charlatans.

Sigaud, a Frenchman, gave us the first idea of looking at the individual against his setting or background. This is a point of importance today since we have come to realize that varying the environment will elicit different reactions from the same person. According to Sigaud there were four kinds of people: The muscular, in whom the muscles predominate over all the other organs of the body; the digestive type, in whom the stomach and intestines dominate the physical picture; the respiratory, in whom the lungs are the "king-pin" of the body organs; and the cerebral, in whom the brain is the dominant organ. Types, said Sigaud, are due to a hormone or chemical secretion that is formulated in excess and produces a type belonging to one of the four groups. And his conclusion was that personality is a totality, acting and reacting against a background from which it can not be separated.

In 1891, an Italian anthropologist, De Giovanni, formulated the Law of Deformations. According to him there were three main groups. The first, the asthenics, are the long-legged and long-armed, thin, high-necked and small-trunked individuals, who, we know now, are predisposed to develop tuberculosis, and may suffer from neuroses and the insanity called schizophrenia, if life goes sorely against them. The second group includes the sthenics, who have a short neck, wide shoulders, short arms and legs, and a large

trunk. These often become the victims of heart and kidney disease and have a tendency to high blood pressure. They are prone—if they become abnormal mentally—to suffer from depressions and maniacal excitements, called circular insanity. The third, and last, is the normosthenic group, which blends both former types, possessing a maximum of their virtues and a minimum of their drawbacks. It approximates the Greek ideal of physical beauty and is called by some the "athletic" type, fulfilling Plato's dream of a "fair mind in a fair body."

The latest evidence offered by the enthusiasts of the constitutional school is that of Kretschmer's work. German psychiatrist worked with several hundred insane who suffered from schizophrenia and manic-depressive insanity, and as a result of this study he believes that we may recognize, from their physical make-up, four types of individuals. His pyknik type corresponds to the sthenic described above and is subject to the alternations of mood which, carried to an extreme, become manic-depressive insanity. The asthenic type, which also has already been described, he found to be seclusive, suspicious, and "shut-in," tending to develop the insanity called schizophrenia, or dementia praecox. These individuals are introverts, isolating themselves from the world, and their withdrawal from reality drives them into a mental disorder (described in a later chapter) that dooms them to a living death. athletic is the perfect, "Greek ideal" type. And, lastly, there is the hypoplastic, including individuals who are underdeveloped physically and who have the basis upon which inferiority complexes can be and often are engrafted.

Kretschmer also puts forward a theory of temperaments:

Schizoid (Seclusive variety)  $\rightarrow$  Schizothymia  $\rightarrow$  Schizophrenia. Cycloid (Moody; temperamental)  $\rightarrow$  Cyclothymic  $\rightarrow$  Manic-depressive insanity.

Kretschmer's conclusions have, in the author's experience, proved valid for the pathological groups, and very probably they are true for the normal groups as well, although for the latter they have not yet been confirmed. The value of work like Kretschmer's and Freeman's (another of the constitutionalists) is that, through it, one can foresee possible injuries to personality as well as recognize the temperament type by physical characteristics, and so guard against such contingencies. Freeman has recently made a study of fourteen hundred autopsies, and his results are very similar to those of Krestchmer, except that they amplify the latter and show the tendency to visceral as well as mental disease. The asthenic and hypoplastic groups were found to have a special predisposition to tuberculosis, while the pyknik and sthenic groups show a tendency to heart, kidney and blood vessel diseases. Furthermore Draper believes that through these constitutional types we can determine whether an individual will develop gall bladder disease, ulcers of the stomach, diabetes, and similar maladies. His method depends upon physical indices which can further our knowledge of the personality, which, unquestionably, has a dynamic relationship with physical disease. This is, incidentally, a causal connection vitally important for educators and teachers, especially, to know.

#### The Influence of Health

Although one would expect an a priori intimate connection between intellectual disturbances and the presence of bodily disease, the bulk of recent investigations seem to show that there is no relationship between such conditions as intestinal toxemia, hookworm, dental caries, malnutrition and anemia, and the intellect. This is surprising, but nevertheless seems to be true in the light of the evidence

offered. However, the non-intellectual, particularly the emotional, elements of the personality are very much influenced by the presence of such conditions. One need only remind oneself of the changes in mood of individuals who are suffering from various physical complaints that transform them from cheerful, good-natured, willing, alert individuals to querulous, complaining, irritable nuisances, to realize the truth of this fundamental relationship.

The change in behavior due to physical impairment is also important. The author recently had a case of this sort come to his notice which is characteristic, and worthy of citation.

A child, eight years of age and still in the first grade, seemed unable to make progress in her studies, and within the past year had become a serious behavior problem. She was restless, fidgety, constantly annoying and distracting other children, and even seemed to enjoy the punishment that followed her misbehavior. On examination it was found that she had "running" ears, which made her partially deaf. After prolonged treatment, the deafness was cured, and immediately the child's work in school began to improve. She soon became one of the best students in the class, and, coincidental with the improvement of her work, her behavior disorder ceased. Her trouble had been that the necessarv ego satisfaction was not forthcoming, due to her physical inability to progress in her school work. To compensate for the neglect, she had indulged in all sorts of misbehavior in order to gain sufficient attention to bring her position up to the requirements of her self-esteem. To dissolve her behavior problem completely, it was necessary only to remove her physical handicap and so allow her to gain ground by normal means.

There is an exception to the evidence that there is no relationship between physical impairment and the intellect. This may be seen in glandular conditions, particularly in *cretinism*, which is accompanied by an "I.Q." below normal, parallelling the retarded physical growth, and which causes a deficiency in mentality that can be improved

by the administration of thyroid extract when the condition is diagnosed very early in life. This subject is considered in more detail in Chapter IV.

In diseases of the central nervous system, particularly, there are noted changes in all aspects of the personality. It is interesting to mention two of the commonest and most important conditions that effect startling changes of this character.

Epidemic encephalitis, the first of these, was brought to the attention of the modern world comparatively recently (1918), and our knowledge of its effects upon the brain and personality is as yet by no means complete. The author has had occasion to observe in the Manhattan State Hospital, in New York, many cases with psychosis due to this disease. The personality changes are protean and very frequently occur remote from a slight attack of the disease. In individuals suffering from the disease, there are many emotional changes, such as silly laughter and unreasonable crying spells, and also decided evidences of mental arrest or retardation. In many instances, however, there is no knowledge on the part of the patient, or even of the family physician, that the individual has had this condition. Perhaps of the several such striking examples that have come to the author's notice, the following is the most graphic:

A boy of seven, very much undernourished and appearing to have a physical age of about four, was admitted to the hospital. From the history it was noted that his development, physical and mental, had apparently been normal until one year before admission, but that the personality changes had been evident six months before the commitment to the hospital. When the incident that precipitated his being sent to the institution occurred, it was found on retrospective questioning that at the age of six, he had suffered from a slight attack of influenza, and that this illness had been so unimportant in the opinion of his

mother that no doctor had been called, the child being kept in bed only for one day. But within several months he had begun to show marked personality changes: Formerly kind and generous and well-behaved, he now began to annoy other children and seemed to take pleasure in beating them; later, he began to flay cats and dogs in the neighborhood; and finally, he attacked one of his playmates with a kitchen knife and severely injured him before adults interfered.

Now in this instance, as in many others, a mild attack of encephalitis was doubtless responsible for changing the patient's personality to such a marked degree. The only physical residual was a slight paralysis of the left side of the face, indicating that the seventh cranial nerve had been struck by the disease.

Alfred Adler, originally a follower of Freud, popularized the concept of the inferiority complex, the second of these conditions. Nowadays, we hear even the man in the street say with assurance that "Blank has an inferiority complex." Adler, in his famous study, "The Neurotic Constitution," explains this principle, which in one form or another is universally accepted. Through his work and through that of others of his school, we understand that individuals who have some outstanding defect, such as short stature, club feet, blindness in one eye, or partial deafness, develop at first a sense of being inferior to those about them; but also that such affliction is often soon followed by a compensation that minimizes or overcomes the social handicap caused by the defect, just as in the anatomical phenomenon of one kidney enlarging to compensate for the other's loss, or of tone lung functioning for two when the other has been destroyed by tuberculosis. We have seen in real life how some individuals with ear trouble become musicians; how several of our outstanding authorities on tuberculosis became interested in tuberculosis research because they suffered from the disease. We may be familiar, too, with the undersized individual who stands very erect, wears high heels, and preserves the attitude of Napoleon—obviously compensating for his lack of height. Somerset Maugham, in his remarkable novel "Of Human Bondage," has presented another good example of such compensation in picturing the sensitiveness and introspection of Philip, the club-footed hero, who because of his disability studies medicine, specializing in orthopedics!

Now it is unfortunate that Adler, like many enthusiasts, has ridden his hobby too far. His principle often fails. If we admit, for example, that Beethoven became a great composer to compensate for his deafness, we wonder why, if Adler's principle is inflexible, Schubert and Rimsky-Korsakoff, with their failing vision, should have been musicians instead of oculists. However, all things considered, it is undoubtedly true that the reaction against constitutional defects often moulds personalities and determines their patterns of behavior. Evidence is plentiful that many personality defects and much abnormal conduct may arise from feelings of inferiority, as we shall see in our study of the neuroses and insanity. Modern psychiatry does, indeed, owe much to Alfred Adler and to the concept of organic inferiority.

The latest link in the attempt to find a physical basis for personality is the work of Rich, based upon studies of urine, saliva, and blood. His conclusions are: that less excitable personalities show acid saliva and urine, while the more excitable have neutral or alkaline urine and saliva; that less aggressive individuals have a high alkali reserve in the blood, while the more aggressive have a low alkali reserve; and that high creatinine, a protein substance, is found in the blood and urine in proportion to emotional stability. These experiments were done on normal subjects. While their inferences are not conclusive, they point

the way to research which may enlarge our concept of the organic nature of personality.

#### The Scientific Approach

Antiquity and modern experimentation are connected by this all-consuming belief in a physical explanation of this total organismic reaction that we label personality. All sciences have taken up the task of finding roots for the emotions, the intellect, and the conduct of individuals by an appeal to anatomy, chemistry, physiology, neurology, and anthropology. Chief among these are the psychological sciences, which have interested themselves relatively recently in this problem, and the biological sciences, which today harbor the hopes of many who can understand life only in physical terms.

Because no single science can, in the author's opinion, create a coherent picture of what the human mind is and how it acts, our journey in this book will lead through strangely various territories: each science must answer in its own terms the questions put to it. Thus, our first problem is to understand the "nature of the beast." What is the organism which we use in reacting against life situations? How is it constructed? What are the laws governing its formation and development? And, the answer coming first from biology, we turn to the recital of the facts as the biologist sees them.

#### CHAPTER II

#### Biology and Personality: How We Behave

#### Why We Behave—The Receptors

UR discussion of the biological basis of personality must of necessity be brief; even this special department of biology offers too many problems for us to study adequately here. However, we shall find the material in this chapter sufficient to create for us a picture of the most important truth of personality: That personality and its patterns have neurological and glandular roots and that responses to social and other stimuli are organically conditioned.

Since behavior has a biological basis, we must know how it is active if we are to understand the dynamics of personality. Impressions cannot, of course, be received without receptors—the telephone receivers of the nervous system; and responses are impossible without the functioning of related organs. Thus, we consider first the three mechanisms of behavior, which are: the receptors, or organs of stimuli; the connecting neural mechanisms; and the effectors, or organs of response.

The cerebro-spinal nervous system and the various senses give us impressions of cold, heat, temperature, anger, approval. These come to us through our receptors and are relayed to the brain. This enables us to react to the stimuli, and we respond in one way or another; if we feel heat, for example, we react by drawing our hand away. Thus a reception of stimuli causes a response after the message has been interpreted and explained in terms of

the body. These receptor organs are of two classes: the exteroceptors and the interoceptors.

The exteroceptors are of two groups, the first including the contact receptors and the distant receptors, and the second including the proprioceptors. For contact organs we have the cutaneous sense organs, which give us impressions of touch, pressure, pain, heat, and cold. Distant receptors are those of the eye, the ear, and the nose. Proprioceptors are organs of stimulation which are found in muscles, tendons, and joints, and which are responsible also for our sense of equilibrium. These give us the impressions by which we orient ourselves spatially.

The other class of receptor organs, the visceral, or interoceptors, are chiefly the receptors of the senses which receive stimuli for the digestive, respiratory, circulatory, and reproductive systems. For example, sensory receptors in the pharynx produce sensations of dryness and a desire for water; and in the stomach there are receptors which cause a feeling of nausea. The other receptors cause changes in the way we breathe, in the way our heart beats; and they determine sexual behavior.

Now everybody is familiar with the first group of exteroceptors, which give us feelings of heat and cold, hearing, touch, and so on. Upon these senses the common fallacy that there are only five senses has been based. But the proprioceptors, which make up the second group of exteroceptors, are less well known: they are organs of reception located within the muscles, joints, and tendons, and are also the means by which we maintain our sense of equilibrium. Constituting others of the at least twenty senses that we really have, they include: organs of static sense, and kinaesthetic, or "feeling-of-motion," organs.

The organs of *static sense* are receptors found in the semicircular canals and are responsible for the maintenance of bodily equilibrium. This process is automatic and is the dynamic of posture and body attitudes; it also helps to coördinate movements. This coördination is secured through a change in pressure of the endolymph—the fluid contained within the canal—as the head changes its position. Kinaesthetic, or "feeling-of-motion," organs are proprioceptors located within muscles, tendons, and joints. These receptors regulate muscle activity and are responsible for spatial orientation. Frequently, syphilis of the spinal cord destroys these sense organs and causes the clumsy gait which is the direct result of muscular incoördination and which is similar to the gait of a normal man whose feet are "asleep."

The second group of receptors, already spoken of as visceral, or as interoceptors, may be stimulated by either of two means: directly, by sensory stimuli; or indirectly, by psychic stimuli from the brain, such as emotions. The first type of stimulation occurs when, for example, we are eating: the direct stimulus of food in the mouth causes salivary action; and the second type occurs when we are hungry and merely *think* of something appetizing—the thought-picture alone likewise causes salivary action. This distinction is of much importance in behavior and in personality studies.

Smell is caused by the stimulation by vaporous solutions of the olfactory nerves in the nasal passage. Taste results from the action of stimuli upon the tongue and upon various parts of the pharynx, these areas being sensitive to familiar substances classified under four primary headings: sour, salt, bitter, and sweet. "Acceptance" results in certain neuro-muscular and glandular activity, such as chewing, salivation, swallowing, and peristalsis. If the food is poisonous or disagreeable, this normal behavior is inhibited and is followed by spitting, vomiting, or other forms of

rejection. The other visceral receptors—those functioning in the respiratory, circulatory, and reproductive systems—have been mentioned above. While these are the known visceral receptors, there are undoubtedly others. The excretion of gastric juice, for instance, is probably due to stimuli received by an interoceptor.

# The Connecting Mechanisms

Strictly speaking, the entire central nervous system functions as a whole. But, for clearer understanding, the brain and the spinal cord may be considered as connecting centers between the receptors and the effectors (the organs of response), and thus as an integral part of reflex arcs. Differences in behavior, it should be noted, are determined at different levels in the cerebro-spinal nervous system. They may be voluntary, involuntary, or reflex: Voluntary actions involve the brain. Involuntary actions—actions that have become automatic through experience and repetition—eventually become spinal in character and are caused by a simple spinal reflex arc, not involving the brain. An example of this latter kind of behavior is seen in the rapid withdrawal of one's hand when a hot object is inadvertently touched; or in the so-called "spinal" animal, which, having been decerebrated, can still carry on simple functions, such as locomotion, without the aid of the brain. Reflex actions are illustrated by the familiar "knee-jerk," the response in this instance being neither voluntary nor automatic.

The *spinal cord*, the first principal division of the central nervous system, is about eighteen inches long and has thirty-one pairs of nerves, which lead from each side of the spinal column, are divided into anterior and posterior branches, and are divided again into motor and sensory

divisions. The cord extends from the foramen magnum in the skull down to the tip of the coccyx, where it lies within the vertebral column and is covered by three membranes. These membranes, or meninges, cover an outer white matter and an inner gray matter and are: the dura mater, the pia mater, and the arachnoid. The functions of the spinal cord are chiefly to conduct afferent, or incoming, impulses to the brain or to the higher levels of the cord, and to conduct motor impulses from the brain out to the periphery: to muscles, tendons, bones, joints, or glands. It is also a center of communication between the afferent and the efferent, or out-going, neurons, and it provides for certain complex coördinating actions. The brain, the other principal division of the central nervous system, includes the medulla oblongata, the cerebellum, the cerebrum, and the pons Varolii, or "bridge." We are learning rapidly about their functions, although we cannot explain many in neurological terms.

The medulla oblongata is a globular swelling in the neck where the great decussation, or crossing-over of motor neurons, takes place. Within it are located, among other centers, the vasomotor and the respiratory centers, which control blood circulation, the heart, and respiration. An injury to either of these centers, it is interesting to observe, can cause death. The cerebellum, the lower part of the brain, is concerned with the coördination of muscular action and with equilibration, depending for the latter upon the reception of afferent impulses from the proprioceptive organs which initiate reflexes designed to maintain the body equilibrium in various attitudes. Diseases of the cerebellum cause a number of functional disorders, such as: asynergia, the inability to accomplish highly coördinated movements; adiodokokinesis, which hinders the pronating and supinating of the hands; and an ataxia, resulting from a cerebellar

tumor and causing the victim to lean to one or the other side and to have difficulty in walking.

The cerebrum, the largest part of the brain, has a depth of from two to four millimeters and is composed of two hemispheres. Its outer portion is of white, and its inner portion of gray, matter. It contains various tracts, principally the cortex and the special cortical areas, and in these are located the sensory, association, and motor areas with which we are already familiar. The pons Varolii, the remaining division of the brain, is a broad band of neurons extending laterally across the medulla and somewhat above the cerebellum.

The autonomic nervous system, which also is included in the classification of connecting mechanisms, is exclusively a motor system. It may be distinguished from other connecting mechanisms especially in that, while the brain and spinal cord are concerned with intelligent behavior, it is essentially concerned with organic processes—with feelings, drives, and so on. Also, it has to do with visceral, not skeletal, activity. It is constituted by the sympathetic and vagus nerves, which run all the way from the region of the neck down into the pelvis, and its divisions are three in number: cranial, sacral, and sympathetic. Its action is as follows:

Afferent fibers run from the central nervous system to the autonomic nerve centers; and through these, impulses may be conducted to glands that respond and yield a secretion, such as gastric juice or thyroid extract, which is poured out into the blood stream. In the region of the neck there are, for example, ganglia (centers or collections of small cells) in the superior, the middle, and the inferior centers; and in the abdomen, sympathetic plexes, solar plexes, and other ganglia, these acting as receiving stations and controlling visceral behavior. We shall see in later chapters, where

the influences of glands are studied, how vitally important this system is to personality.

# Organs of Response: The Effectors

The effectors, which comprise the third mechanism of behavior, are so called because they effect actions. They are of two classifications: muscular and glandular. Muscular effectors include unstriped and smooth muscles, which lie in the internal organs, or the viscera; and skeletal muscles, which are located in such portions of the body as the legs and the arms, and perform their duties by contracting when motor impulses reach them. The glandular effectors, on the other hand, include the duct glands and the ductless glands; the former perform such familiar functions as salivation and perspiration, and the latter are visceral thyroidal, parathyroidal, adrenal, and so on. The adrenal glands, for example, operate because of stimulation by the autonomic system; they bring about an increase in blood circulation and elaborate a secretion which, being poured into the blood stream, mobilizes sugar resources for fuel and prepares the body to run, to fight, to "get really angry," or to do other things requiring much energy.

Muscles and glands are always, unless injured, in a constant state of tonicity so that they can act instantly when called upon—although occasionally, as when we are "paralyzed" with fright, muscles fail us; they can no longer be stimulated. The muscles, in order to function, must observe a certain "principle of conflict" which, although seen throughout life, is especially interesting. Every set of muscles has two opposing nerves, and the flexion of a muscle requires both a stimulation and an inhibition: the flexor nerve is stimulated and the extensor organs are inhibited. This is known as the law of contrary innervation and is the eternal determinant of conduct. Its operation in

the opposition of the vagus and the sympathetic nervous system is especially important: through it, a balance is obtained that makes for health and an integrated personality.

#### How We Act: The Nervous Arc

Nerve impulses are physiological energy of a chemical and electrical nature, traveling at a rate of about one hundred twenty-five meters per second. They come in from the surface of the body through afferent nerves, go to a nerve center, and then initiate a response through an efferent nerve. A stimulus such as heat travels from the receptors in the skin through afferent nerves and reaches the columns of Goll and Burdach, in the posterior part of the spinal cord. The impulse then goes up the posterior column, still remaining an afferent impulse. Soon it meets other neurons—in the average person three neurons are usually necessary to transmit an impulse to the brain—and connects up with it. Finally, it passes up through the spinal cord, through the medulla, and up to the cortex of the brain.

In the cortex, which is the surface of the *cerebrum*, the upper portion of the brain, there are located three distinct areas: the *sensory*, the *association*, and the *motor* areas. Into these, in order, the impulse which we have been following enters. Passing from the sensory area, still through an afferent nerve, it enters the association area, where it is conditioned and where the character of the action that is to result is determined. Then, after having become efferent, or motor, in the association area, it passes into the motor area. From here a motor impulse travels through the medulla, in which eighty-five per cent of the motor neurons decussate (cross over) and then lead down to a tract in the spinal cord, where are located the anterior horn cells.

And finally—it is assumed that the action called for is motor—these latter cells send out an impulse to the effectors, and an action results. The impulse may go to the visceral receptors—which, as we remember, may be stimulated directly or psychically—and cause some motor response; or, if the sympathetic nervous system is stimulated, the blood vessels will enlarge and a glandular action may be initiated. However, just what the response in such a situation will be, depends upon the personality of the individual. Three men may react to a stimulus in three different ways, what they will do being determined by the associations that the stimulus has aroused. To all these responses, the term behavior is applied.

### Mental Processes

Mental processes are characterized primarily by facilitation and inhibition, these two factors being directly related to intelligence and comprising one of the three principal criteria by which we measure personality. Inhibition may be said to be demonstrated in "will power" and in voluntary action; while facilitation, its opposite, is the quality directly due to the areas in the cortex of the brain which produce a reinforcement of certain impulses and make us—as it may familiarly be expressed—"want to do other things." We are always at strife with ourselves. Educators explain the situation well when they observe that inhibition arises from the substitution of learned responses for impulsive responses.

Now although these functions are all centered in the cerebral cortex, making that an important link in the personality chain, intelligence as a whole—that quality that makes an act purposeful—is not localized in any single area. This fact is one of the most important of all for one to remember. The brain serves merely as a coördinating mechanism in the activity of the organism. The exponents

of cerebral localization, which is the assignment of specific functions to definite areas of the brain, have indeed tried hard enough to prove their belief, but modern neurology has summarily demonstrated that it is ridiculous to attempt to localize abstractions. It is the whole central nervous system that, in addition to being concerned with motor habits, is concerned with intelligence; through it, and through the neuromuscular and glandular systems, the individual is adjusted to his environment, accomplishes his ends, and is led to or from the situations he desires or dreads. Intelligence is intrinsically a process distributed throughout all parts of the physical and neurological organism, and it must be regarded as a Gestalt—a whole.

Evidence to support this view is offered by those who have advanced the theory of cephalization. It is pointed out that the earthworm, an annelid, shows a primitive nervous system that runs the length of its segmented body. The head portion comes into contact with the environment, searching for food and avoiding or rejecting dangers and dangerous substances. This tends to develop centers in the nervous system at this portion to safeguard the individual more efficiently; and, by a process of evolution, the brain, as well as a coördinating mechanism in the cephalic region, is developed. Now man, at the top of the phylogenetic scale—the peak of the animal hierarchy—recapitulates the fundamental development of the animals lower in the scale. Thus his intelligence—and his personality, too appearing to emanate only from the brain, really emanate from his whole body.

Experiments by Lashly and others have even raised some doubt that many portions of the brain are as continuously useful as most neurologists believe. Their experiments prove that the destruction of motor areas in certain animal brains does not affect intelligent behavior. Lashly has therefore come to the conclusion that the removal of such an area—a priming, or instigating, area—means but the removal of *one* of the circuits through which certain motor habits are organized; and, since some other part of the brain may stimulate deeper correlation systems that are still functioning, it is possible for the usual mode of behavior to result.

Among human beings, similar phenomena are often observed, as when a person having brain syphilis shows very few if any mental symptoms of the inroads of the disease. It must be added, however, that many other diseases which attack "key" centers will cause visible manifestations of trouble. Individuals having motor or sensory aphasia, which is caused by tumors, syphilis, and other such diseases in the brain, may be in a serious mental condition: when a person has sensory aphasia, which is manifested in word-deafness and word-blindness, he may not be able, for example, to explain a word seen on a placard; or word-sounds that he hears may not register intelligibly in the brain. This condition would be caused by the fact that, while the afferent neurons were still functioning, association areas had been destroyed and impressions could not be formed centrally; no intelligent response could result. Some other mental diseases resulting from brain damage include: motor aphasia, manifested in a loss of speech or in an inability to write, or both; amnesia, which may have a psychic as well as an organic cause and which is seen in loss of memory, the patient being able, perhaps, to remember only certain periods of the past; and also that affliction of persons who invent and utter meaningless terms—neologisms. What we have seen here of the latter diseases does not, obviously, add to the visible evidence of compensating mechanisms (although even under the circumstances described, such mechanisms probably are operative); but it does emphasize the importance of such mechanisms as we have.

Compensation takes place, of course, in other respects. When one lung is destroyed by tuberculosis, the other does its best to serve as two; the kidneys similarly are prepared to assist each other; and when a person has a diseased valve of the heart, the heart muscle enlarges and furnishes power to offset the harm. Blind men often, as we know, develop extraordinarily keen hearing and smell, and become more sensitive to bodily contacts; the deaf frequently intensify their sense of vibration. In fact, as Adler has emphasized, individuals with certain defects "lean backward" to compensate for them. It is one of Nature's fundamental processes.

The particular importance of compensation in so far as it concerns our discussion of personality, is that it makes still more emphatic the fact that not only intelligence, but also personality, is a *Gestalt*, a totality, rather than a mere sum of parts. Always, when we deal with an individual, we are dealing with an intricately ramified pattern, an entire body reacting to an environment. Hence, incidentally, the care that must characterize measurement and "I.Q." mental tests.

In review, then, we may say that in the biological foundations of personality we see how personality and its patterns have neurological and glandular roots, and why personality is a totality. In this view of personality, there is a distinct advance over that of the separatist schools of thought which would seek to isolate the personality and to cage it, thinking to understand it better so. We have avoided that fallacious approach, although it is an approach of such a long history that modern science has had the utmost difficulty in dissuading even the most intelligent minds from it. We have learned rather that how we behave remains, in the last analysis, limited by our biological make-up and functions.

### CHAPTER III

# Genetics: How We Become What We Are

### Pioneers in Genetics

ENETICS is the biological science which explains the continuity of life; it discovers and formulates the similarities and differences, mental and physical, between those of the same family and race. As a science, it is only thirty years old. Yet, people have always observed that "like begets like." Herdsmen and breeders of animals have known for centuries that stock could be mated to bring out certain desirable traits such as speed and endurance in horses, strength in oxen, and milk-producing quality in cows.

The first evidence that there was a mechanism of heredity came with the discovery of the spermatoza, or male germ cells, by Hamm in 1677. Later, about 1700, Spallanzi discovered that the function of this male cell was to unite with the ovum, or egg cell, of the female, and that this union was the basis from which the adult developed.

But it was not until 1866 that a real knowledge of the laws of heredity was given to the world. Gregor Mendel, an Augustinian monk, experimenting in his cloister garden at Brünn, Austria, cross-bred two species of garden peas which differed in height, in flower and seed color, and in other respects; and from the results of this hybridization, he deduced certain principles which are known as the Mendelian laws of heredity. These are as follows:

(1) Traits, or individual characters, are transmitted from parent to offspring according to a definite mathematical ratio.

- (2) If we know their ancestral constitution, we can predict what the offspring will look like, how they will differ, and with what frequency certain traits will appear in various generations.
- (3) Individuals demonstrate by their inheritance that they are aggregations of independent and separable traits and that each of these traits is unitary and may appear in combination with other traits.
- (4) If we breed two hybrids, and if the grandparental traits appear in the offspring, a definite number of the children will resemble one grandparent, and a certain proportion will look like the other.
- (5) A particular combination of traits—blond hair, blue eyes, large teeth, and soft skin, for example—that characterize an individual, can be broken up among his descendants and in them appear in all kinds of new combinations. These combinations are a definite and predictable fraction of the whole.

Now these revolutionary discoveries by Mendel were published in a small journal, and very few paid any attention to their immediate or remote importance. scientific world was then too busy quarreling about Darwin's theory of evolution to bother about anything else. However, in 1900, De Vries and Tchermak "rediscovered" Mendel and started modern genetics on its way. Vries gave us the theory of "mutations" to explain the variations in types, human and animal; he held that alternation in the genes produced new and diverse types. His theory was important and influential, although we know now that the variation in types of evening primroses described by De Vries is due to the adding or subtracting of chromosomes, thus causing a gene mutation. Mutations, we have learned, are probably due to radiation, such as that of the cosmic ray, which alters the germ plasm and

therefore permits the trait to become hereditary. This latter is the latest theory and seems to have been substantiated by experiments with the X-Ray, which has caused remarkable changes of similar nature.

Following these discoveries of the pioneers, Francis Galton at the end of the nineteenth century founded the science of biometry, or physical measurements. He tried to estimate resemblance between parents and offspring in terms of biometrics and thus discover which traits came from the various ancestors. Later he studied men of genius in an attempt to show that they formed a definite organic type that could be recognized by a characteristic appearance. With this method, however, he had little success. Lombroso, who shortly after tried to find a criminal type that could be recognized by a low brow, a receding hair margin, a low intelligence, an animal cunning, and a brutal face, was no more successful. Genius and the criminal have alike refused thus far to submit to rule-of-thumb.

Weissman was another trail blazer in the study of heredity. In his major experiment, he cut off the tails of twenty-six generations of mice, and, observing that none of the rodents produced tailless offspring, he concluded that certain traits were hereditary and could not be altered except through changing the germ plasm. This experiment should have discredited once and for all the theory that "acquired characteristics" could be transmitted, but despite this and more evidence that has constantly been discovered, some biologists are still unconvinced and have never given up attempts to disprove Weissman's conclusions.

### Modern Genetics

The position of genetics today is due chiefly to the work of Thomas Hunt Morgan, who in 1910 began his epochmaking experiments with the fruit fly. As a result of his studies, we now have what is called the "gene theory" of heredity, a short survey of which follows.

Man is the result of sexual union: every individual originally exists as two separate cells derived from the parents. Individual lives begin with the fertilization of the egg cell by the sperm cell. Progressively, this fertilized egg divides in two, then in four, and so continues dividing until the billions of cells which make up the entire body are present. Thus we grow from the union of parts from two diverse people.

Each of the two original cells has a membrane that surrounds a jelly-like material called cytoplasm: this is the substrate, the basis for the future constitution. Within this is imbedded a nucleus made of linear threads of protoplasm—a protein stuff—called the chromosomes, which, interestingly enough, can be seen under the microscope. Now each one of these tail-like threads is divided up like a string of beads, the "beads" being called the genes and forming a "necklace" that is paired, one set of genes coming from the father and another from the mother. The strings may have as many as a thousand segments, or genes, each with a definite work to do in producing the new individual. Genes are the units of heredity: they are present in the original fertilized ovum and determine all the traits, mental and physical, of the individual. We know this because we can produce all sorts of changes by altering the genes. If they are destroyed or altered, there are changes in the individual produced: an alteration of a single gene may change the color of the offspring's eyes or the shape of his nose; or it may make him feebleminded.

Each gene has a definite order in this string, always occupies the same place in the chromosome, and always has the same function. The fact that the genes are double—

one string having come from each parent—is insurance for normal development; thus, even though the mother should give a gene which might make for feeblemindedness, the brain of the organism would be normal if the father's gene for brain development was not defective. It takes two defective genes, paired, to produce a bad trait like albinism or feeblemindedness; where only one gene of a pair is defective, the other causes normal development, the trait produced by the normal gene being called dominant, and the characteristic of the defective gene being termed recessive. Normal genes are dominant and are manifested, overshadowing and pushing defective genes and recessive traits into the background; thus, genes for favorable traits are usually dominant, while defective genes are recessive, exceptions to this rule being such as in the occurrence of brachydactily-shortness and webbing of the fingers, a malformation caused by genes that are defective but dominant, thus tending to be inherited.

A reader may now ask, "Has a gene ever been seen?" The answer is that genes cannot be seen, but that in view of experiments we cannot escape the conclusions that they make up the chromosomes. Morgan's studies of the fruit fly have convinced the scientific world that genes are realities. The evidence that they do exist follows.

It has been discovered that the sex of an individual is determined by the possession or lack of a certain chromosome called the "X-chromosome." The female, we have learned, has two X-chromosomes, while the male has but one. These have been found to be transmitted in a definite way from parents to offspring; and there have always been certain traits which followed this distribution. These are called "sex-linked traits." The father always gives the daughter his X-chromosome, while the mother gives each of her offspring an X-chromosome. The male sperm cell

may contain an X-chromosome and possibly a rudimentary Y-chromosome.

The father manufactures germ cells by the billions. How many contain "X's" and how many do not contain "X's" we do not know, but we do know that the normal is the "haploid," or set of two: chromosomes always occur in sets of one, two, three, four, or more. Some species have twenty-four sets, like the human being, and some have four sets of chromosomes in pairs, etc.; but all have X-chromosomes. Now, since the male cell, as we have observed, has one X- and sometimes a Y-chromosome, a cell that fertilizes an ovum may yield a "2X," an "XY," or an "X," the Y-chromosome usually, although not always, being defective or rudimentary.

By the working of the genetic system, the father's Xchromosome, as has been pointed out, always goes to his daughter. Knowing this, we can trace the transmission of certain defects and traits. Thus, if a trait appears in the female but not in a male, we can trace its distribution through its appearance in the offspring, and we label it "sex-linked"; in other words, it is inherited according to a sex-linked distribution. If the trait is not linked with the X-chromosome, but with the other chromosomes or autosomes, it usually gives a Mendelian distribution in the offspring, meaning that there will be three dominants to one recessive in the second generation. For example, "bar" eyes, which are abnormal in the fruit fly, may be seen in the female but not in the male; and by experiment we find that it is due to a defect in the X-chromosome coming from the father: the son, getting one "X" from the mother, has normal eyes, and the daughter, getting a defective X-chromosome, manifests bar eves.

It has also been found that portions of this sex chromosome, which can be stained and seen under the microscope,

can be detached by use of the X-Ray, and that the brokenoff piece can be linked to another, a non-sexual, chromosome. Here a certain trait—eye color in the fruit fly, for example—is not distributed as a sex-linked trait as before but follows the principle of Mendelian inheritance: there are three dominants to one recessive in the second generation. Through this splitting off of parts of chromosomes and reattaching them to others, and through watching the results, the conclusion was inevitable that the linear threads of protoplasm called chromosomes must be made up of minute particles which singly or in groups must control the inheritance of certain traits. Further experimentation, too detailed to introduce here, has confirmed this conclusion.

At present, more than fifty diverse genes have been demonstrated in the X-chromosome of the fruit fly; undoubtedly there are another fifty, as yet unknown, which further study will reveal. By very complex breeding experiments, it has been shown that other chromosomes also have diverse, separable parts, or genes, and that these are responsible for the traits of the organism.

Human beings have twenty-three (male) or twenty-four (female) chromosomes. Heredity is essentially, then, the result of the difference in the individuals mated and of the consequent difference in their gene pairs. It is the diverse combination of genes contributed to the offspring by the mother and father.

# The Growth of the Embryo

The total individual results from the fertilization of the ovum, or egg cell, by the male cell. When the sperm fertilizes the ovum, one cell results, in the center of which is a nucleus, within which, in turn, are the chromosomes. total individual contains everything for his entire development even in this one-cell stage. That one cell divides into two, then into four, and so on; and each time it divides, the nucleus ruptures the inclosing membrane, and the genes suck in the cytoplasm, a jelly-like material which is the ancestor of the adult body and out of which the genes manufacture the diverse organs and tissues of the body. As the genes mix with the cytoplasm and alter its nature, the cytoplasm is poured out from the nucleus to await the next cell division. Now at the two-cell stage, each cell has the same set of genes; but when the cell divides, the genes divide, and each new individual cell is found with the same number of genes as its parent predecessor. Thus, the process goes on constantly, until, from the two original cells, the billions of cells necessary to form the body exist.

Responding to the influence of the internal environment and proceeding in harmony with certain laws of development, the embryo passes through the multiple-cell stage until it forms a blastula, at which stage it resembles a hollow sphere and is lined with cells. At one end, the sphere invaginates and forms lips and a mouth, this region being called the blastopore. Now the importance of the blastopore is that near it is found an organizing center, from which impulses are sent out to the various parts of the blastula. They bring about the process of differentiation of cells to form the tissues of the various organs. It is in this way that the differentiation and formation of the adult body is begun and that, at varying periods, the fate of the cells is fixed so that they can produce thereafter only the tissues of a certain type.

The gastrula, a further stage in the development, is a hollow sphere of increased complexity. Before the differentiating impulse had passed, one could have taken a part of the blastula which normally would develop a hand and transplanted it to another part of the organism; but now it develops the kind of cell that should develop in the

new region; that is, what would have developed into a hand, now becomes an eye because it takes root in the eye regions to which it was transplanted. Once a cell has become differentiated, transplanting it to another region will not cause it to form any other structure than the one for which it was originally designed, which fact has been demonstrated in many experiments by Speman and his followers.

Each species has a specific time at which certain organs are formed. "Hand" cells begin to develop hands, let us say, at three months; after this time, the hand cell's fate is fixed, and it can form nothing but this structure. The fixing of cell fate varies with the species but is constant for the race. What each cell produces depends directly upon its relation to the organizing center and upon the specific time when it receives this differentiating impulse. Also at a specific time, the cells are seen to divide into "zones"; and later the ectoderm, the mesoderm, and the endoderm, from which certain structures in the individual—such as the skin, which is ectodermal in origin—are formed.

In summary, the fundamental process of development and growth is the interaction of the genes and cytoplasm. They work together and produce the human being. The genes act on the cytoplasm, constantly diversifying it and altering its state, while cell division goes on. All the cells have the same set of genes. What happens to the genes depends upon the internal environment, to a certain extent. After the cell's fate has been fixed, or the cytoplasmic constitution set, environment has effect only within prescribed limits.

Now a fertilized ovum has cytoplasm coming from the mother that is practically the same in all ova of the same mother; it is the *genes* that are different. Thus, the material that the genes have to work on is practically constant in character, and the gene combinations are what

make the difference in the total individual formed. However, what the genes can do is definitely limited by the nature of the cytoplasm: if, for instance, there is originally poor cytoplasm, you cannot expect to see a high-grade individual produced. The cytoplasm is the circle within which the genes must work their wonders. No individual can be other than the product of his genes and of the cytoplasm that the genes work on.

Different organisms or different species have different periods at which cells differentiate to form the antecedents of the adult body. The sperm cell, for instance, affects the development from the moment it enters the ovum. There are certain genes that are necessary for the early development of the individual; others for the later and even post-natal development. For illustration, in certain individuals we may have what we call a lethal gene, which is merely a defective gene which arrests development at a certain period and causes the death of the embryo. With a pair of lethal genes, development does not start at all, and the embryo dies early. Or, as another illustration, it may be that the gene pair necessary for growth in the third month of the human is defective: this will permit development to continue until the third month, and then death in utero will take place. Defective genes at that stage have caused the embryo to die because growth could not be carried any further.

Experiments have proved also that certain genes control the unrolling, or developmental, processes. If the female fruit fly has a lethal gene located in the X-chromosome, half of her sons will die. Why? Because, as we have seen, the sons get an "X" only from the mother. Half of them get a lethal gene, and since they do not get any X-chromosome from the father which would nullify the lethal gene, they will die at a certain period in their develop-

ment. The other half get a good "X" and live: the lethal gene in that case being attached to the X-chromosome, it has sex-linked distribution.

Certain genes also are necessary for the adult's vigor and even for longevity. They are not necessary only before birth but also after birth as well, although they may not function until a certain period in the individual's life. Often, indeed, genes are present from the single-cell stage but do not begin to work immediately. It should be added, however, that longevity depends more upon environment than upon heredity, since disease or injuries can nullify completely a potentiality resident in the longevity gene.

Of course, the prime distinction to be seen in gene activity is that characteristics may be either sex-linked or Mendelian. Results depend upon whether they have existed in the X-chromosome or in the other twenty-three chromosomes. Thus, we have a doctrine chiefly of cellular predestination.

# The Mechanism of Adjustment

All through life runs the fundamental process of adjustment. It is the primary problem, along with organic development, of all living things. It is a universal phenomenon, seen alike among beasts and men. It is the *fitting* of the organism, through its own behavior, to the world in which it must live.

Adjustment begins in the embryo and does not end until death. We have an early illustration of it in the differentiation of the cells: that whole process depends upon it. What would happen if, for instance, "hand" cells in the embryo were put into a place where the organism has predetermined that eye or leg cells shall form? Since those cells are already differentiated as hand cells, they could develop into nothing else, and the result of the change of

position—a "maladjustment"—would be a grotesque malformation. Thus even embryonic adjustment will predetermine what the full-grown organism will be.

The extent to which adult personality depends not only upon pre-natal but also upon post-natal adjustment is Society takes individuals with diverse genetic backgrounds and makes equal, and therefore unjust, demands upon them. Consider the fact that not even brother and sister have the same environment, let alone the differences in their gene combinations. Is it not unjust, even stupid, then, to demand that even more disparate individuals make themselves like their fellows, even when sometimes they are hardly able to adjust themselves in any way to their environment? Yet we demand complete uniformity in all departments of life. Throughout society, codes for manners and morals exist as if all were biologically attuned to them; in school one always has to maintain an "average"; children, who as a group have only begun their social adjustment, are treated all alike and are taught by the same methods. Indeed, society is continually demanding an adjustment biologically impossible for its individuals. And its craving for uniformity eventually wrecks many personalities that would otherwise exist happily in the world.

In an urban civilization where people live in the closest of contacts, people have to conform to what others think. Sometimes there are five or six diverse forces pulling from all sides. It is indeed surprising that we do not have more insane and biologically inadequate people than we actually have. Why should such a simple thing as failure in school assume so monstrous a proportion as to make a boy believe that his life is valueless, and drive him to suicide? Only a faulty education with its consequence of a malformed personality can explain such false values. Society, which makes demands upon the individual, should

make sure first that it is not taxing him beyond his potentialities. Intelligent handling of many maladjusted individuals at the *pre-school* age would prevent much unhappiness; it is what we need most. It is not too much to say that parental stupidity as well as the ignorance and indifference of the social group causes most of the unhappiness and maladjustments of life.

There is yet another angle to the problem of adjustment. What occurs in the one-cell stage may be repeated in the many-cell stage, and the mode of response to environmental demands helps us to understand the *limits* of adjustment. Most of us are continually on tip-toe trying to reach something beyond our grasp, while genetics shows us clearly that the law of Nature ordains the mediocre, the average in life. Society desires neither the defective nor the genius. Genetically, it is impossible to breed a race of supermen, because there are too many billions of combinations of genes with their limitless possibilities; further, we cannot breed human beings like fruit flies.

It is common knowledge that many geniuses have been maladjusted, and the situation is not difficult to understand when we see how they are faced with constant and senseless demands to subscribe to codes designed for their inferiors. Too often they have lived centuries ahead of their time and have suffered the malignant hate of the average man who suspects and dislikes any variant from medocrity. Ironically, later generations usually recognize the genius scorned in his own time.

It is this problem of the encouragement and cultivation of the superior that faces education today. Although the ideal of democracy demands universal education, science shows the fallacy of assuming equal potentialities in all children. Now provision has been made for the handling of backward children, but little has been done for

the more important group—the gifted children. The neglect has caused much harm. These gifted children become "problem" children and even juvenile delinquents quite as frequently as backward children, merely because of their being lumped together and fed as grist to the educational mill. Here adjustment is cramped where it should be expanded. For the most part, education has placed children in groups, according to their ages rather than ability; and it has placed a premium on mediocrity that penalizes the superior individual. It is true that there are schools for superior children; but these are generally for the children of the well-to-do.

The facts must be faced: if superior children are not to be a menace to themselves, to their families, and to the social group, they must be studied and provided for, and their problems must not be underestimated.

# Hormones and Personality

We have mentioned that genes result in the development of temperament; and this, it is now known, has a definite correlation with body build. Now temperament and body form are brought about through the hormones, secretions of the ductless glands that are absorbed into the blood stream and carried to the various organs to act as excitors, or chemical "messengers." They act upon the body and the mind and produce physical and mental personality traits. As the internal secretions are elaborated by certain glands and poured into the blood stream, they control the life cycle of different organs. Thus the pituitary secretion is responsible for skeletal development, while the thyroid has important effects upon the temperament and the intelligence of the individual.

But what is the relationship existing between the hormones and the environment? First, hormones are produced

not only by the genes, but possibly also by the environment, as adrenalin and thyroxin. If we have an individual who suffers from thyroid insufficiency, adrenalin insufficiency and various degrees of pituitary insufficiency, hormones produced synthetically in the environment can be used to ameliorate these undesirable conditions, this ministration necessarily being kept up throughout life. In this instance, it must be noted that, while thyroid extract, if administered continually, will overcome thyroid insufficiency, the hypothyroid may still pass on genes for defective thyroids to his offspring. This happens because the gene itself is not affected by the relief of his thyroid symptoms through proper treatment.

Second, and contrarily, in most species hormones determine sex through sex glands independent of the environment. We know that sex is determined by the line of distribution of the X-chromosome, although we cannot predict it—at least, we cannot predict it very high in the phylogenetic scale. The sex hormones cause the differentiation of the body with the formation of secondary sexual characteristics.

On the other hand, the environment determines to an extent the reaction to the hormone by a specific organ. The circulatory system reacts in one way to the thyroid; the respiratory tract in another. Parts of the body, serving as internal environment, determine different reactions to some hormone. The gastro-intestinal tract reacts by peristalsis; the heart by rapid beating; the skin by increase of perspiration. Once the individual has been formed, the environment takes the upper hand in plotting the reaction of the personality to life situations.

Not only does the environment supply hormones, but also it can affect those produced by the body. It actually can and does change the hormones at times. For example, the thyroid secretion can be altered by stimuli such as fear, rage, and so on. During the World War, many soldiers went out to fight, perfectly normal; yet they came back with bulging thyroid glands and "pop eyes." The fighting and constant strain upset the balance of the thyroid in the body and overstimulated it, thus causing Graves' disease, or hypersecretion of the thyroid. The same is true of hyperadrenalism, which can be produced by excessive fear stimuli present in an unfavorable environment.

Other factors in the environment are vitamins, chemical substances found in foodstuffs which act like hormones and promote proper growth and development. Children whose diet lacks Vitamin C, found in oranges and tomatoes, do not gain weight, have nutritive disturbances, and are highly susceptible to infections. Lack of Vitamin C brings on scurvy, and was formerly common among seamen on sailing ships which did not touch land for long periods and so did not take on board fresh vegetables in sufficient quantities. Another important vitamin, "D," is found in butter, in animal fat, and in egg yolk. Lack of this causes a failure of proper skeletal development in children, particularly when the children do not have sufficient sunlight. Furnishing this vitamin by means of proper food or cod liver oil will correct bony deformities if they are not of long standing. A lack of Vitamin D causes rickets, a lack of calcium deposits in the bones; a lack of Vitamin E causes rats to die in utero. Other vitamins will undoubtedly be discovered that will add to our knowledge of how such substances function for normal development.

The environment may be considered the manufacturer of vitamins in the same way that genes produce hormones; and indeed many of their effects prove that the analogy is true. Lack of vitamins through faulty diets shows how the environment can produce unfavorable personality types,

although it is generally considered to have physical consequences only. It is easy to see why the physical deformity attendant upon rickets, for example, should induce feelings of inferiority which may persist long after the cause and the physical effects have been removed.

A further example of how the environment alters the personality and the form of the body is offered by various experiments on plants. Certain types of maize, if grown in sunshine, will develop into red maize; but without sunshine they will develop into green maize. Apparently there is a recessive gene which is brought out by the lack of sunshine; this alters the *plant* personality in the presence of unfavorable conditions for normal development.

Again, a fruit fly which has a recessive gene for a defective abdomen manifests it only when the fruit fly is bred in too moist a medium; and the fruit fly with a recessive gene for reduplicated legs will develop them only if bred in too cold a medium. The manifestation of certain genes is possible only when the environment deviates from the normal or favorable type. Again, the giant type of fruit fly appears only if the fly is overfed or overnourished in the larval stage. Thus we are brought to the conclusion that biological inadequacy need not become manifest if the environment is relatively favorable, and that life situations for uncertain personalities should never be such as to demand the impossible.

Diverse personality traits can be produced either by the genes or by the environment. We can alter the genes by radiations such as the X-Ray and the cosmic ray, and so we conclude that no trait need necessarily be either hereditary or environmental. This is a fundamental fact and has been proven experimentally. Thus, we name traits by the way that they can be altered; they are "hereditary" or

"environmental" only until we find that they can be altered, one by the other.

Individual differences therefore are due to either the genes or the environment. Now at the present time, most of the individual differences are due to the genes; but that does not preclude the possibility of the environment's becoming more important as a method of treatment and control when our knowledge and technique of education improve. Considering the relative importance of heredity and environment, one can say only that both are necessary. The processes are mutually operative.

Most of our knowledge of which traits are affected most by heredity and which are most linked with environment, comes from studies of identical twins, who come, of course, from one egg. Studies were made by Neuman of Chicago and Muller of Texas on a series of identical twins, all of whom had been separated at birth. In some instances, they had lived thousands of miles apart, and had had a different schooling and a different environment; therefore, one could find out certain differences which could be only environmental in derivation. Physically, such twins are quite alike, except that their right hands very frequently fingerprint more nearly alike than the right and left hands. Now it was found in these studies that, where the environments had been alike, there was a great similarity, mentally, physically, and temperamentally, between all of the traits manifested. The intelligence quotients were about equal where both members of the pair had received the same amount of education; but, as one would expect, the individual who had had a college education had a higher intelligence than the less educated twin. Traits that were dissimilar were, therefore, considered environmental, and traits that were similar, hereditary. Non-identical twins do not greatly resemble each other—at most, hardly more

than do other members of the family, popular opinion to the contrary notwithstanding.

The importance of environment is greater than that of heredity in respect to organic disease. Although individuals with defective genes that tend to produce a subnormal body offer a soil better prepared to receive disease-producing organisms, the environment that supplies the agents of disease may cause illness even in the best developed body. The environment may lower the individual's resistance and lay low a perfect body with a deadly sickness. In short, we do not inherit diseases, but we do inherit the environment that brings them. We inherit the social causes: the home, sick members in the family, lack of money to buy food—all of which contribute to prepare a soil for disease implantation.

Now although diseases are for the most part environmental in origin, susceptibility to certain diseases is often inherited. For example, genes that determine whether an individual will be asthenic or sthenic, in that they determine the efficiency, inefficiency or over-efficiency of the thyroid glands, will also determine his susceptibility to certain diseases: if he is an asthenic, he will be predisposed to tuberculosis; if a sthenic, he is more likely to contract diseases of the heart, blood vessels, or kidneys. This phenomenon does not, however, belie the truth that even normosthenic, or normal, individuals can and do suffer from these troubles in certain environments.

Summarizing these facts, we may say, first, that many "gene effects" are really produced by the hormones whose antecedents are the genes, these hormones laying down the glands responsible for their elaboration: for example, it is not hormones, but genes, that produce brown hair or eyes; but the shape of the body is determined by the hormones coming from glands responsible for body build.

Second, hormones are more important in the post-natal development of the individual than in the pre-natal development. Third, different genes produce different hormones and different traits, thus yielding diverse organic types and being ultimately responsible for the mass differences between various racial groups.

# What Can Genetics Do for Us?

What is the promise of genetics? Can our present knowledge help to weed out unfit personalities and to make the world a better place to live in? Will selective breeding improve the race of man as it does domesticated animals?

Eugenics, a project born of genetics and aiming at human improvement through selective breeding, emphatically answers Yes to these questions. Eugenists feel that all the troublesome personalities—the pauper, the delinquent, the feebleminded, the criminal, the weak—are caused by defective genes, and that if we prevent these undesirable individuals from breeding, in a few generations only the "best people" will survive and propagate their kind, and society will be much improved. Eugenists would prevent chiefly the occurrence of individuals who have genes that produce color blindness, early insanity and other inferiorities that make them burdens to themselves and to society.

Certainly this would seem to be a worthy aim; but is it practical? Can the vision become truth, or do the limits of our knowledge doom it to the death of all Utopian schemes?

The first objection to the plan is that genes alone do not produce the total individual: as we have seen, one environment may make an individual defective even though, under other conditions, with the same set of genes, he might be normal. In other words, his defective genes need not become manifest if we give him a favorable environment.

Even an individual predisposed by genetic constitution to tuberculosis, will not develop the disease if he has proper diet, rest, plenty of fresh air, and other such advantages; and an individual predisposed to mental breakdown through defective genes, may not become insane if he is permitted to develop in accordance with the principles of mental hygiene.

The second, and greatest, barrier to the wide application of eugenics is the fact that genes are concealed, the possessors not being aware of their characters until they are manifested in children. Superior genes in feebleminded parents may become paired and result in a highly intelligent child. On the other hand, superior parents are frequently seen to have feebleminded children, and everyone is moved to wonder how this could be possible when the apparent heredity was intellectually so brilliant. Often, even suspicions as to the paternity of children are aroused by such occurrences, merely because of a common ignorance of the vagaries of heredity. And yet either of the above situations could be explained easily. The superior parents each carried a defective gene, perhaps from some remote ancestor, that made for feeblemindedness; and when these genes, being of the same order, paired, the child was doomed to idiocy. Merely the reverse happened in the making of the child of the feebleminded parents. Ironically, such happenings can often be explained, but in the light of present knowledge they cannot be predicted. Statistics show that, even if we were to segregate and sterilize the mentally defective, about eighty-nine per cent of the feebleminded born would be born of so-called normal parents.

Discoveries that have been made in respect to a hereditary disease known as *hæmophelia*, or "bleeders' disease," are perhaps suggestive of the possibilities of recognizing and then preventing the operation of defective genes. Hæmo-

phelia is caused by a defective gene which reduces the ability of blood to coagulate and thus often causes "bleeders" to bleed to death, sometimes because of a trivial scratch. Females transmit the disease in the human species, but almost never suffer from the disease themselves: the males inherit the recessive genes, and it is they who manifest the decreased clotting power of the blood. If the males marry, they pass the trait on to their children; nor is there much chance of escaping this familial curse. It is conspicuously present in several of the royal lines of Europe, its origin probably having been in the Saxe-Coburg-Gotha family: the late Czarevitch manifested it and on several occasions almost bled to death because of a slight injury, and the Spanish royal family also has suffered from it. Obviously, it will be seen, two individuals who both have these tendencies should not mate: misfortune may be avoided by a study of the family tree and by examinations of the blood, which yield conclusive results as to the presence or the absence of hæmophiliac tendencies.

The hope of eugenics lies, then, first in finding methods for detecting, in normal individuals, carriers of hidden defective genes, as we now recognize "bleeders," and then in preventing their mating with individuals of similar genetic tendencies. Second, we must alter and control the environment so as to make for the best possible development in accordance with individuals' potentialities.

It must be said that at present both of these methods remain remote possibilities rather than probabilities. This is particularly true of detecting carriers of hidden defective genes, since then it would be necessary to breed human beings like fruit flies. And this is so clearly impossible that the enthusiasms of the eugenists must be looked upon, for many years to come, as premature, unwarranted, and visionary rather than practical and possible of fulfillment.

What, finally, does genetics contribute to our knowledge of the personality?

First, it introduces the dynamic picture in place of the static: it sees man in emergent evolution, arising from the slime and the ooze of the lower phylogenetic scale, groping and climbing towards something higher, ever higher.

Second, it shows that human beings are personalities, each with individual temperaments, likes and dislikes, and different potentialities for reacting to the same life situations. Education and other sciences must be prepared to deal with the individual rather than the mass. Personalities are totalities, patterns, *Gestalten*, each acting and reacting against a background within the radius of their potentialities; and they can be handled and understood only as *individuals*.

Third, and last, it yields the hope that, although our present knowledge of the process is but rudimentary, in some not too distant future some technique may be develolped that may permit man to further the progress of his species by weeding out those of his fellows who are illequipped to meet life.

While the complexity of its problems forbids unrestrained optimism over its possibilities, genetics gives us ground for hope. Brilliant achievements for the race may yet take place on the stage that it has set.

### CHAPTER IV

# The Glandular Basis of Personality

# Myths and Facts about Glands

NO DISCOVERY of modern science has been hailed with so much enthusiasm and hope as that of the function of the glands of internal secretion. For some reason, these organs seized upon the imagination of scientist and layman alike. They were to afford the panacea for all human ills: they were to build the superman and the new civilization, to make the ignorant wise, to change the emotionally dull into sparkling personalities, to help the impotent and futile to become potent and dominant. Here was the magic, the touchstone, the wondrous fluid that would make the alchemy of souls a reality instead of a dream; here was the answer to the problem of the ages. At last we were to recreate the weak, the dull, the idiot and the imbecile. What prevented? Had not experiments with animals, even with infants and children, shown that remarkable changes in body and mind could be caused by the administration of gland extracts? Only the heretic and the ignorant could disbelieve that the Messiah had come to lead the cheated of life into a promised land where the milk and honey of normalcy awaited them.

But alas for the disciples of the new cult! Failures succeeded early successes, and the worshippers began to grumble and doubt when the new god could not consummate his miracles. Dismayed, the high priests cried for time. Yet the years fled, and it was found that the pierc-

ing of the veil brought, instead of crystal truths, new perplexities, new contradictions, new doubts as to the rôle of the glands in human life. No longer were they seen as separate entities ruling over specific domains, but rather as allied potentates with a country in common. Discouraged, many worshippers deserted the new religion and stood off to mock and jeer where once they had shouted hosannahs.

Now what was truth and what was delusion in these new prospects? What was myth and what was fact?

Our answer must of necessity be indefinite. So much has been written about what we do know of glands, and so little about what we do not know of them, that a complete and wholly reliable survey of the field is well-nigh impossible. Yet, when the evidence is carefully studied, we can safely arrive at certain general conclusions. The background of gland study will engage us first.

Endocrinology, or the science of glands, is of but recent origin. It is true that the ancients were interested especially in sex and the sex glands, and that this interest might possibly have led to research, but there is little evidence that their curiosity carried them far; perhaps, for the most part, they dismissed the significance of glands as did Henle, the celebrated anatomist, who wrote: "these glands have no influence on animal life; they may be extirpated or they can degenerate, without sensation or motion suffering in the least." The Romans understood that Alpine people suffered from goiter because their inland water-like that of our own Mid-Western cousins-lacked certain minerals; Roger of Palermo, a surgeon of the twelfth century, used seaweed, because of its iodine content, in the treatment of goiter; and Paracelsus reasoned quaintly that idiots were the offspring of goitrous mothers. But, aside from these vague speculations, there was little interest and less research given the functioning of glands until some forty years ago.

Our knowledge of the subject today is based upon the studies of Claude Bernard, Brown-Sequard, Wilhelm Falta, Biedl, and other pioneers in the scientific approach to the chemistry of character and body. However, much of their evidence is contradictory and confusing; very little is absolute; and what we know about the glands is isled in an ocean of what we do not know. At best we may say that we are reasonably sure of a few general principles. If the public, as well as science, will bear this in mind and refuse to expect miracles, glandular therapy may yet justify itself as a means to shape human ends.

The important glands of internal secretion are:

1. Thyroid

2. Parathyroid

3. Pituitary

4. Thymus

5. Sex

6. Suprarenal

7. Pancreas

8. Pineal

These glands have no duct, or "door," through which their secretion may be poured, as have the sweat glands. They elaborate an *internal* secretion which is absorbed directly into the blood stream and carried to various parts of the body where it affects the activity of certain tissues. Thus adrenalin, the secretion of the medulla of the adrenal glands, will cause, among other things, the mobilization of sugar when sugar is needed for fuel in either fight or flight. The internal secretion is called a hormone and acts as a chemical messenger; it excites specific tissue reactions, the chemical nature of most of which is now known.

The ductless glands form a chain and are mutually interdependent; a disturbance of thyroid activity, for example, causes menstrual upsets through involvement of the female sex gland, the ovary. There is a reciprocal relation between the endocrines and the sympathetic nervous system, emotional shocks being transmitted through the latter to the glands and stimulating them to secretion. Fear impulses coming through the sympathetic nervous system cause the adrenal gland to pour out adrenalin into the blood and thus enable the organism to fight or to flee from the danger that threatens. But overstimulation of glands may disturb their normal functions; thus, the pancreas, if subjected to oversecretion to supply its hormone, insulin, because of overeating of sugars and starches, breaks down; and diabetes, which is an inability of the pancreas to supply enough insulin to handle even a normal intake of carbohydrates, results. Conversely, a primary disturbance of the glands may give rise to irritation and disorders of the nervous system.

Hormones, the secretions of the endocrines, have the power to excite tissues or organs of one, and only one, type. Thus, pituitrin, which is the active principle of the posterior lobe of the pituitary, is concerned with the stimulation of involuntary muscular action and with the maintenance of blood pressure. Antuitrin controls the development of the bony skeleton and the sex glands, failure of this secretion in early life producing an infantile sexual development known as Froelich's syndrome—perfectly pictured by Charles Dickens in his character Joe, the fat boy.

Glandular dysfunction is not evident at birth; but from early childhood to puberty, disturbances of the endocrines make themselves known by abnormalities in the development of body and mind; of emotion and intelligence; of character and behavior. After growth has been attained, gland disorders may produce certain changes such as acromegaly, or the gorilla-like enlargement of the skull, hands, and feet of an adult who has pituitary disease.

To the operation and the influence upon body and mind of these glands, we now turn.

## The Thyroid

Our knowledge of the thyroid and its action is greater than that of any of the other glands, for the thyroid has been the longest known and most thoroughly studied, and its disturbances have been the most readily subject to treatment.

The thyroid secretion, or hormone, is thyroxin and was isolated first by Kendall in 1914. At least 1/100 of a grain daily is necessary for normal life. The gland, the enlargement of which the ancients recognized as goiter, consists of two brown masses connected by an isthmus and is situated in the midline of the neck, above the windpipe and close to the larvnx. It is found in all vertebrate animals but is largest in man. Lower in the phylogenetic scale, the thyroid was a sex gland and was connected with the ducts of sex organs; but, as the animal kingdom evolved and became more complex, the thyroid traveled upwards until in man it reached its position in the neck. It still retains, however, some of its sex relationships, and it swells in menstruation and pregnancy. Even the Romans recognized its connection with sex in their laws: a man could place a string about the neck of his bride upon the wedding night, and if the string failed to stretch, the husband had legal grounds for annulment—it seemed proved that his bride had not come to him as a virgin! The Romans built this principle upon the tendency of the thyroid to swell with sexual excitement; their basis was indeed correct, even though their conclusions sometimes worked a hardship upon some virtuous girl.

By its secretion the thyroid controls the development of hairiness and normal moisture of the skin and the growth of the long bones of the body and of the skull; and the brain, the intelligence and the emotions owe their normalcy or abnormalcy to its sufficiency of or lack of secretion.

Most of all, thyroxin is responsible for oxidation, or the transformation of living tissues into energy; it is responsible for the building up and tearing down of body tissues. It lubricates and accelerates the life processes. Excess thyroxin speeds up the rate at which we live; deficient secretion slows down our pace. This gland can completely transform a personality. If we add even minute amounts of thyroxin to the diet of a newt of the axolotl family, this sea creature loses its gills, develops lungs, grows legs, and becomes a land animal! Then, if we remove the thyroid gland from tadpoles, they never mature into frogs but remain tadpoles all their lives; and if we add thyroxin to the diet of tadpoles, they metamorphose into frogs before the usual time of this natural change, although they remain miniature frogs instead of growing to their usual size. Such is the effect of the thyroid upon the development of the body of the individual; how it affects the mind and personality we shall learn in later pages.

The thyroid secretion is essentially an *iodine* compound and tends to keep the blood stocked with this substance, which is necessary for normal activity; about one part of iodine to ten million parts of blood is the normal ratio. When iodine is lacking in the diet, as in the Great Lakes region, many individuals become *goitrous* unless it is supplied in medicinal form. This lack is due to the use of fresh water, which does not possess the iodine found in drinking water used by people living in seaboard regions. On the other hand, a great excess of thyroxin can and does cause death by speeding up the life processes beyond a limit which they can sustain. Victims of this excess lose weight very rapidly, become exhausted, and are almost literally burned out.

Thyroid activity is in many ways exactly opposite to adrenal activity. A balance is maintained—indeed, not

only between these but also between the other glands of internal secretion. In the normal individual, all the endocrines pool their efforts in order to secure harmony, and thus the body and mind give the impression of a welloiled machine. Not infrequently, however, one gland secures an ascendancy over its brethren, and we find a thyroid-centered or pituitary-centered personality. It is through the study of such individuals that we are enabled to determine what rôle each gland plays in the drama of human personality. We find, for example, that the thyroid tends to increase the heart and pulse rate whereas the adrenal tends to slow them, this indicating how glands may act as a check upon one another. For perfect health, no one gland should stand out above any other: when this does happen, there arise definite gland personalities which are recognizable in proportion to the intensity of the variation from the norm. Glandular discrepancies often are, incidentally, hereditary, and through the operation of the genetic system they often explain racial and individual differences in traits of body and mind.

Variations in thyroid activity give rise to disturbance in the chemistry of the body, this being manifested by the appearance of what we may call the *thyroid personalities*. Among the most familiar of these are the *cretins*, of whom the following case is representative.

At birth, Sam Curtis seemed a normal baby. His mother did notice that he slept more than other babies and that he did not awake and start crying for food, but she told herself only that "Sam is a good boy; he's going to be the kind of child that doesn't give much trouble."

But after nine months, the family noted that Sam hadn't developed like most babies. For one thing, he hadn't any teeth—only a thickening of the gums. His tongue seemed to be too large, and it interfered with his breathing because it stuck out of his mouth at all times. His skin was yellow and dry and

scaly; his eyes watered; he showed no interest in his surroundings; he was pugnosed and thick-nostriled. His hair was thin and brittle, and his eyebrows were scanty. He did not get his first tooth until he was more than a year old, and then it decayed quickly. He was all trunk, with tiny arms and legs; he was as pot-bellied as an alderman and had a fat-padded bull neck. Nor could Sam recognize either of his parents. And he would indicate his desire for food or water by grunting or by a scream. He never smiled or laughed; in fact, he seemed not to live, but to vegetate.

His parents became alarmed and began to look at each other with suspicion. Was their child to be a hopeless idiot? And whose fault was it? Each began a hasty search of his family tree, and at last they breathed a sigh of relief when they could recollect no insane or mentally abnormal ancestors. But they finally became impatient with their family physician, who kept assuring them that "Sam will outgrow it." They became convinced that the physician was behind the times and unable to diagnose the condition. So they took their child to a specialist in a large city.

The specialist needed but a glance to see that the child was a cretin, due to a lack of thyroid secretion. Both parents, he noticed, had enlargements of the neck that suggested a tendency

to goiter. In addition, they had lived all their lives in the "goiter belt," which comprises the states of the Great Lakes section.

So Sam was fed small doses of thyroid substance. And within several months a miracle seemed to have happened. His skin became moist and warm, several teeth were cut, he grew several inches; and, best of all, the cranky and irritable child disappeared: in its place there was a new Sam. His dull eyes became bright, and his vacant expression gave way to a cheerful face. He became active and seemed to discover suddenly all the possibilities for play in this new world. He learned to talk and became interested in everything that went on around him. Of course, the Curtises were overjoyed at the miracle which had converted an apparently irritable imbecile into a normal child, and they marvelled at the wonders of science.

But a few months later they became tired of continuing the thyroid feeding and stopped it. Why not? "Sam is getting along fine now; no need for medicine." And they were right—

for a week.

Within ten days, Sam became listless, dull, lost interest in things; his skin began to take on a dry, bloated appearance, and he became again the hopeless and helpless thing he once had been.

Frightened, the Curtises returned to the specialist and confessed their neglect. He advised them to begin the feeding of thyroxin again and never to discontinue it for even one day of Sam's life. Within a week, Sam became normal again. He has developed into a normal boy. At present he attends school and shows average intelligence. No one would ever suspect that he had been a cretin.

This case illustrates the ultimate depths to which a lack of thyroid secretion may reduce the individual. The deficiency may be inherited or acquired after birth; it may be present in infancy or come on at as late a period as three or four years of age. We have seen that, where it is present, there is in addition to failure of physical development, a demoralization of the personality. In fact, in certain cases, the individual resembles the utter deterioration seen in dementia praecox, in which the personality vegetates and is reduced to the lowest terms upon which life is possible.

The sooner cretinism is scientifically recognized rather than regarded as an affliction visited by God upon the parents, and a condition that can be "outgrown," and the sooner treatment is begun, the better the chances of complete restoration of the normal personality. If the condition is neglected for a few years, thyroid feeding can only arrest or slightly improve the cretin, since the changes have already become more or less set.

But whereas the cretin represents the lower depths of total thyroid deficiency, there are all grades of personality changes which may result, and they depend upon the intensity of the lack of thyroxin. This deficiency can now be measured and expressed as a percentage, which is found through the estimation of the basal metabolism and is expressed in the per cent below the normal (zero). The basal metabolic rate is determined by the thyroid gland and means the minimal expenditure of energy which the body makes for all its functions; it is calculated after the individual has had eighteen hours of rest and has been for that period without food or water. Elevation of this ratio indicates oversecretion; depression indicates undersecretion. Thus, a cretin may have a basal metabolic rate of -40 to -70 or more. Other less malignant forms of thyroid deficiency are visualized in rates of minus ten to minus thirty and are accompanied by very slight physical and mental symptoms.

Jenny Covert, aged forty, was the mother of six children. She had felt well enough until she reached the age of thirty-nine, but then she began to notice a gradual increase in the size and a thickening of her face and hands. She had difficulty in speaking and walking, was always tired, and became so depressed that she could not bear to be alone. She felt that she "wanted to sleep all the time," and lost interest in everything. She gained thirty pounds in a few months. Her skin became dry and scaly, and her hair began to fall out. She noticed also that her neck was enlarged.

It was recognized that Jenny was suffering from a lack of thyroid secretion, which in adults gives rise to a condition called "myxoedema" because of the thickening and infiltration of the skin which characterizes it. This disturbance is the equivalent of cretinism in childhood, and it sometimes comes on after the thyroid has been removed by operation and the patient has not followed instructions to take thyroxin by mouth daily. The administration of thyroid extract to Jenny resulted in a complete restoration of her original cheerful personality. Thanks to her daily dose, she lived more than twenty years longer without any recurrence of her trouble.

The consequences of *hyperthyroidism*, or oversecretion of the thyroid gland, are seen in the following case study:

Anna Stone was the mother of a six-weeks-old baby girl. She

was driving with the child and her husband when they crashed head-on into another car coming around a sharp curve. Anna and the child were apparently uninjured, but the mother was shocked and panicky for days after the accident. She became very nervous and irritable, going into a rage over trifling disturbances in the household routine. She began to perspire and lose weight; in a few months, she declined from 140 to 90 pounds. Her eyes became prominent and seemed about to pop from her head. She developed attacks of palpitation and dizziness. For the most part, she was very depressed, although sometimes she would become elated. She could not sleep and complained of always feeling "as if I were on the go." She began to worry about her loss of weight and could not understand it in view of her ravenous appetite. She thought at times that "she was seeing things." But she felt she could get well "if only this thing in me which drives me on would let me go."

Anna's condition was so serious that it was necessary to operate upon her and remove most of the gland. After this, she began to gain weight and to become placid, and she left the

hospital a "new woman," as she expressed it.

But within six months she returned. Her change was astounding: she had become enormous, having gained seventy pounds; her skin was dry and a pasty yellow, her eyes dull; she felt sleepy all the time and said, "I don't care whether school keeps or not." She admitted she had not taken thyroid extract for more than two weeks after leaving the hospital; "it was too much trouble and, anyhow, I felt perfectly well."

It was obvious that she was a victim of a myxoedema, or a thyroid deficiency due to the removal of most of the gland and to a failure of the portion remaining to supply her with sufficient secretion for normal functions. With the gland feeding, she rapidly lost weight and has remained normal up to the present

time.

Hyperthyroidism and its personality disturbance are the result of too much thyroidal secretion in the blood of the individual. It whips him beyond his desire and capacity; he cannot "let down," no matter how he wishes it. Such a state comes on after some great shock such as Anna

experienced. During the war, many soldiers went into the trenches apparently normal, only to come out after a week or two with the bulging neck and the pop eyes of hyperthyroidism. This was due to the constant fear of death. None of these men had been even scratched, but the emotional wound had been more than sufficient to bring about the condition called toxic goitre.

Anna's condition was an example of how impulses through the sympathetic nervous system may upset the glandular balance, permitting one endocrine to dominate its fellows to the distress of the individual.

The types whose histories have been given in detail above are stronger manifestations of thyroid disease. There are many mixtures or shadings of these which are seen in many apparently normal individuals. Occasionally an individual may alternate between having too much and having too little thyroid secretion. For a week or two, he may be exalted, overactive, continually "on the go," gay, flushed, unable to sleep; the next week, he is depressed, sluggish, disinterested in everything, and his skin becomes dry and he lacks appetite. These personalities complain of their cyclic moods. Life is either heaven or hell: there is no purgatory for them, no middle ground—their heads are either floating in the clouds or buried in the mud. They present, in extreme cases, the picture of manic-depressive insanity. Kretschmer found a definite correlation between thyroid types and this type of insanity.

Within normal limits, the thyroid may dominate the personality picture and produce a type which is seen in everyday life and which is compatible with normal existence. Thus, a slight excess of thyroid secretion may be considered favorable to an individual. It may produce a superior type who is above average in intelligence, capable of reaching emotional and intellectual heights, alert, cheerful

and bright-eyed, with good color in his cheeks, white teeth, and moist and flushed skin. He will be high-strung, lean, temperamental; he will have a rapid pulse and will tend to develop heart and nervous disorders. If these individuals press their luck too far, they "burn out." Many artists and poets, such as Keats and Shelley, who have evidenced intense sensitiveness have been thyroid-dominated.

A patient of the author's was a young advertising man. At twenty-eight, he was at the "top of the heap" and earning a salary in excess of twenty-five thousand dollars yearly. He was warned to slow down—that he could not rely upon his thyroid to carry him forever at such a pace, for he was working fifteen hours daily. But his ambitions knew no limit. He kept driving himself for several years. But at last his work began to fall off, and his associates, noticing the difference in the quality of his work, decreased his responsibilities. Still he grew worse; he complained of "lack of pep" and knew that the "sparkle has gone out of my work." He became depressed, lost weight, worried continually until he thought he was on the verge of a "nervous breakdown." He took a vacation, and he came back feeling fit, but somehow he could "never get into my stride again." Today, at thirty-five, he is glad to work for one-fifth the salary he earned seven years ago. In him the divine spark, kindled by a moderate oversecretion of the thyroid, merely glimmers. He is, in truth, the victim of a burnt-out, or exhausted, thyroid. Had he not abused it, his efficiency and superiority might have been maintained for many years.

The other side of the picture reveals the sub-thyroid individuals who are our daily companions and who are therefore considered normal. We see them as the stout, squat, dumpy or blocky people who are phlegmatic and good-natured, disinclined to worry, and who make the best of life as they find it. They reach no heights and plumb no depths; they are kind and well-intentioned, are good to their families, and constitute the "safe-and-sane" element of society. They take on weight easily and assume responsi-

bility without grumbling, often being known as the "tired business man" type. Furthermore, they exalt the material values and look with tolerance at the artist and creative workers who "are not our kind." They are the Babbitts of the American scene, and are included in the conventional concept of the German hausfrau.

In extremes, this group develop myxoedema, just as the hyperthyroid group may have pop-eyes and the bulging neck of toxic goitre. They are sallow-faced and have dry, brittle hair; their eyebrows become scanty; they like to take "afternoon naps," and they become dull and prosaic. They lack energy and ambition; their sex life becomes unimportant to them; their intellectual interests are few and limited in scope. They have a subnormal temperature and are susceptible to many diseases, especially those of the heart, the blood vessels, and the kidneys. They are often the victims of depressions and melancholia, this happening among women most frequently at the time of the menopause, or change of life. The first of the following cases illustrates this condition.

Elsa Grant was divorced at forty-two after an unhappy marriage which had lasted but one year. Within a few weeks after the separation from her husband, she became depressed, tearful, and irritable, and she gradually lost interest in her old friends. She became dull and at times seemed to be in a stupor, sitting in one spot for hours and staring at the floor. Sometimes she would burst into tears but would give no explanation of what was going on within her mind.

It was at first thought that she was approaching a state of involution melancholia. But the appearance of her skin, the dullness of her eyes, the thickening of her hands, and her constant desire for sleep, indicated that she was suffering from an insufficiency of the thyroid caused by her emotional upset, due of course to her divorce and abetted by menopause, which had just begun. Treatment with thyroid extract restored her to normality within a few months.

Roger Hammond's parents were perfectly normal in every respect and so could not understand how such a child could be born to them. Within a few weeks after birth, Roger had the appearance of a little old man. His skin was wrinkled and his face looked like nothing other than a caricature of an elderly man reduced to an infant size.

This latter condition is called *progeria* and represents a thyroid disturbance by which the individual skips from infancy to senility without passing through childhood, adolescence, or the adult stage. It parallels what can be done experimentally by feeding thyroid to tadpoles and converting them into miniature frogs who never grow. These human pigmies rarely live beyond eighteen, remaining childish in behavior, although senile in appearance. They die most often of heart disease.

Thus, we see the thyroid as one of the most important determinants of personality. If it is normal, life becomes full and colorful; but if it is insufficient, existence is converted into a Stygian blackness. To do its best for the body and mind, it must harmonize with its sister glands, to which we now turn.

## The Pituitary

The pituitary really comprises two glands: an anterior and a posterior part connected by a bridge called the pars intermedia. The organ is grayish-yellow, the size of a pea, and lies in a bony cavity, called the sella turcica, or "Turk's saddle," at the base of the brain. Its function in the human body was not determined until modern times, although speculation concerning it was rife among the ancients.

The two parts of the gland are different in origin and in secretion. The anterior gland develops in the embryo from cells in the mouth area and has a secretion called tethelin, which controls the development of sex, the skin, the brain and the skeleton, and is also responsible for the capacity of the individual to tolerate sugar. The posterior gland originates from the oldest embryological part of the nervous system. Its active principle is *pituitrin*, a colorless fluid that is secreted into and bathes the spinal cord. This secretion raises blood pressure and causes involuntary muscles, such as the uterus, to contract.

Complete removal of the gland results in lethargy, a fall in temperature, and death within a few days. Berman maintains that hibernation, or the winter sleep of animals—and in isolated instances, of men—is due to a periodic shrinking of the pituitary cells; he calls it "a seasonal wave of inactivity." It is certain that the somnolescence of individuals like "Joe the Fat Boy" in "Pickwick Papers" is related to hibernation; in both instances there is an underactivity of the anterior pituitary.

The thyroid and pituitary are closely related in their activity, which is often complementary; the thyroid makes energy available and the pituitary converts it into use through the brain and sex life, over which it is dominant. The pituitary is the gland of endurance; people who lack stamina and tire easily are usually the victims of insufficient pituitary action.

Mankind has always been fascinated by the deformed and misshapen. It has had in the freaks of life sport for the fools, wonder for the many, and scientific curiosity for the few. The Egyptians prized dwarfs because they desired the benefit of their supposed miracle-mongering powers of divination. They saw them as closer to the gods and hoped for favors through them. Indeed, many of the ancients deified dwarfs as gods—Loki was but one of many. Dwarfs were also the social ancestors of the fools and the court jesters of European monarchs; reigning princes

burned to possess them, because to have them was to enjoy good fortune. In their eyes, to be deformed was somehow to be divine, and so the dwarfs were treated with reverence and their babblings listened to with awe.

Nor has the curiosity about the misshapen been confined to our ancestors who saw dwarfs as demons or divinities. The side-show and the circus freaks testify to the morbid interest of the mob: the latter stare in wonder at "Bosco—Half Woman, Half Man"; they gape at "Fanny the Fat Woman," weighing six hundred pounds; they marvel at "Tiny Tim," who is thirty-six inches tall and "old enough to be your grandfather." Even college graduates playing on baseball teams rub the spine of their hunchback mascot before going to bat. A professional gambler rubs a midget's spine before he goes into a game involving thousands of dollars. The great god Luck is, indeed, still wooed, as in ancient times, through his high priest, the dwarf.

But science has broken the spell of superstition concerning this unfortunate human being. He is now revealed as he truly is—as the result of an insufficient secretion of the anterior pituitary in childhood. Gone are his trappings of divinity; fled are his pretensions of wisdom and oracularity. For the dwarf is as small in mind as he is in body. His utterances are more often those of a fool than of a philosopher.

The failure of sufficient tethelin causes the formation of ateliotic dwarfs, which are the Singer midget type and are symmetrically formed, contrasting with the stunted appearance of thyroid dwarfs. It is probable that the race of African pigmies is ateliotic: these dwarfs are men and women in miniature, and they function like ordinary human beings on a reduced scale. But even the most superior of their kind represent at best a kind of super-baby, and their conduct is but adult infantilism.

Joe Klein was ten years old when a peculiar change began to come over him. He took on weight very rapidly until he reached one hundred sixty pounds; he had a "girdle of fat," and heavy breasts, like those of a woman. His skin became dry and of a peculiar fatty appearance. His hair began to fall out. And being unable to study because of frequent headaches, he did not progress in school. He was always sleepy and drowsed off frequently during the day.

The personality changes as well as the physical effects were diagnosed as the results of pituitary insufficiency, and feeding of the gland began. Within a few months, Joe changed. He lost much weight, his headaches and sleepiness disappeared, and his intellectual and emotional reactions became keen. Under treat-

ment, he was soon in every respect normal.

Oversecretion of the anterior gland in childhood will produce a giant. The gland may become overactive at any period during childhood before the skeleton is complete, and a child may grow seven inches in height in one year. In the Irish giant, McGrath, the gland was found to be the size of a small apple instead of the normal pea size. Circus giants, seven and eight feet tall, are individuals in whom for some unknown reason the anterior pituitary began to grow very rapidly in childhood. These giants are intellectually dwarfed; their resistance to common infections is low, and their life span is apt to be short. Their personalities are unfavorable; they are shy, selfconscious, and not easily socialized. Gigantism has all the disadvantages of dwarfism: unusual people are never happy in human society, which is based upon the principle of uniformity and in which the accolade is nearly always to the average and mediocre.

If overgrowth of the anterior gland begins in the adult, the condition of acromegaly results:

Harris Steele was a powerful six-footer, weighing two hundred and ten pounds and famed for his feats of strength. He was not only athletic but also very intelligent, and in every way he was adjudged a "superior personality." But at the age of twenty-five, Harris began to suffer with violent frontal headaches, dizziness, blurring of vision, and finally double vision. This trouble continued for several years, and his family noticed that his face was changing: the cheekbones enlarged, his hands became spadelike, his feet huge; his tongue became much larger, and his voice changed. He had no beard, a low blood pressure, and an abnormal craving and capacity for sweets. He felt weak and sleepy all the time. Most important of all, he deteriorated intellectually and emotionally. He finally became blind in one eye.

It was obvious that Harris was the victim of an overgrowth of the pituitary gland; this was confirmed by an X-Ray of the skull. This showed that the pituitary filled the sella turcica (its case) and protruded outward and backward, pressing upon the optic nerve and causing the blindness. A portion of the gland whose overgrowth was due to a tumor was removed, and subsequently Harris was treated with pituitary extract. Within nine months, he became the normal personality he had been, and

even his vision became quite normal.

Harris was a pituitary personality in that his unusual strength and intelligence were due to a decided activity of the gland until puberty. From that time until the age of twenty-five, the gland remained quiescent; but some infection or acute illness aroused it, and overgrowth and oversecretion brought about the results described. Unchecked, the condition would in time have wrecked his personality and physical health beyond repair.

There are types in which the anterior pituitary gland is much more active than the other glands. It forms, when kept within bounds, the strongest, physically and mentally, of all personalities. Abraham Lincoln and Charlemagne, and probably the Imperial Prussian guards of Frederick the Great, were anterior pituitary-dominated individuals. Until acromegaly set in, Harris Steele also showed all the virtues of this type.

Thousands of years ago there lived in Europe the Cro-Magnon people. They achieved a culture which rivals our own, but they succumbed to a destiny which their brain could not avert; they suffered extinction because they could not overcome their environment. These Cro-Magnons, as a race, were probably of anterior pituitary persuasion.

These individuals are tall and spare, well-knit and well-muscled; they are long-headed, oval-faced, have thick eyebrows and long, firm jaws; their teeth are large, and their arms and legs are hairy. They are highly intelligent and masters of themselves and their environment; they have the vision of genius and the drive and practical ability to make their dreams come true.

The personality, however, may be controlled by overaction of the posterior pituitary and an oversecretion of pituitrin. When this occurs, women tend to be overfeminine; woman as a rule is posterior pituitary-controlled. They are slight, smooth-skinned, rosy-cheeked, wide-eyed, and have a high-arched palate and high-pitched voices. Much "flapperism" and license—which many so-called modern women mistake for freedom—is due to oversecretion of pituitrin. These girls and young women are the thrill-seekers and the personalities dominated by a feverish desire "to go places and do things." They seldom know what they really want: they are being driven by something within them towards a goal they cannot visualize; they cannot sit still in their furious twenties and foolish thirties. Often the orgy of secretion "burns out" the posterior gland, and then they enter the fatuous forties to become placideyed, gentle and well-behaved matrons who look back with tolerance, and yet with regret, upon the madcap follies of their mauve decade.

The masculine equivalent—also due to excess pituitrin—is seen in the short, paunched individual who has little hair

upon the trunk and extremities. Such individuals are given to moods, high and low; their enthusiasms fluctuate, and they lack decision. They find their greatest representation among artists, and much of the beauty of painting, sculpture, and music is due to their efforts. They are nearly always unhappy in their love lives.

Sometimes a small sella turcica imprisons the gland and prevents its normal growth in children. Berman believes that this causes a pituitary inferiority in children and accounts for many juvenile offenders, incorrigibles, young tramps, and "moral imbeciles." To what extent this is true is a moot point and is discussed in the chapter on the criminal personality. For the moment it suffices to point out that the author's experiences in prisons and in various types of corrective schools, such as the truant and parental institutions, have convinced him that anti-social behavior in children is not infrequently of pituitary origin. Glandular treatment has had some success when it has been used with discretion when needed. Schlapp, in particular, has had considerable experience which tends to confirm this opinion.

The pituitary may then be visualized as one of the most important glands determining the destiny of mankind. When we understand its rôle more fully, we may be able to prevent or to cure defects or bases for adult personality deficiencies which we are now powerless to combat.

# The Thymus

The thymus gland is situated in the chest, just below the neck and astride the windpipe; it overlaps the great vessels of the heart as it extends downwards. It grows in size up to the age of seven years and then usually undergoes atrophy. We do not know what the active principle or the

internal secretion of this gland is—in fact, we do not know that the thymus is an endocrine; but it behaves as if it were, and we consider it as such.

The thymus controls the individual during childhood by inhibiting the activity of the sex glands. If the ovary or testis is removed, the thymus will persist; if the thymus is removed, the sex glands will mature early and the phenomena of puberty and adolescence will be premature. Thus, sexual precocity—sexual activity under ten years of age—may be explained by an early degeneration of this gland.

Persistence of the thymus keeps the young from maturing and makes adults behave like children. The gland has some relation to growth and nutrition, and to certain muscular diseases; but the exact nature is unknown at present. Its chief rôle is to act as a check upon the other glands in childhood: these are prevented from a too rapid development before a given time, such as puberty.

Certain individuals in early childhood manifest overaction of this gland and herald a thymic dominance later in life. Little Eva of "Uncle Tom's Cabin" was one. Children of this kind are delicate, satin-skinned, and "angel-eyed"—the dream fulfillment of their mother and the despair and envy of the neighbors. They are too perfect; they need to be sheltered against the buffets of life and are too fragile for conflict. And in reality, they are too good to live; although they seem healthy, they have little resistance to disease and succumb to infections, such as measles or an attack of bronchitis, that would be trifling to normal individuals. Sometimes they die suddenly when an anæsthetic is administered. The author saw such a woman die in childbirth when given a few inhalations of chloroform. Autopsy in this case showed that the cause of death was an unnoticed persistence of the thymus; it had failed to atrophy before puberty.

Thymic individuals are sometimes saved by compensating activity on the part of the pituitary. But when this grace is not granted, abnormalities of physique and character become evident. The male tends to become feminine: he is smooth-skinned, small-waisted, beardless. and lacks the masculine distribution of hair in the genital region. The female also shows an arrest of normal sexual development; she, like her brother unfortunate, is genetically castrated. She has a thin skin with a delicate sheen, has insufficient menstruation, and is narrow-hipped, flatbreasted, thin-haired. Both have small hearts and poor arteries and so die from ruptures of blood vessels caused by blows received in accidents or sustained in athletic contests. Also, their physical inferiority is frequently translated into psychic terms; they are shy, self-conscious, and find it difficult to adjust themselves socially. They suffer from sex difficulties and are often found in the ranks of the homosexuals.

They stand out as "different" in their group, and through the process of compensation they attempt to secure recognition and ego satisfaction. To accomplish this, such personalities often become "problem" children and thus step to the center of the stage. They may become "bed-wetters," or lie or steal. In a word, they become morally deficient and in later life are seen as drug addicts, criminal perverts, and gangsters.

Seen and understood, these unfortunates have a claim upon the collective pity of society; they are driven into their abnormal conduct by a devil within who has robbed them of every human being's right—a balanced glandular system. Very often they commit suicide, finding in death the only way of escape from tabooed desires to which they will not yield and without which they cannot live.

This type is called the status thymico-lymphaticus and can be diagnosed by the X-Ray, which shows an enlarged thymus, persistent after it should have degenerated.

William Tyler was the son of a well-known physician who gave him every advantage. But from early childhood, William was "delicate": he caught every illness that came along twice as seriously as did his brothers and sisters. His nurse was wont to shake her head and say that William was not long for this world. His brothers looked upon him as a "sissy," although they protected him from their "gang" playmates. William tried to join them in sports, but his lack of ability brought him ridicule, and he gave up the attempt.

His brothers were sent to boarding school, but his mother kept him at home, fearing to expose him to the rigors of such an experience. Finally, at the insistence of his father, who hoped to "make a man of him," he was sent away to college at the age of sixteen. But at the end of the freshman year, William was expelled with several classmates. Arriving in the city, he was afraid to go home and face his father's wrath. He registered at a hotel and there committed suicide by shooting himself through the heart.

His father identified him at the morgue. Examination disclosed a large thymus gland and the other characteristics of status thymico-lymphaticus. It was later found that his expulsion had been due to his being a member of a homosexual group at college.

Thus the thymic personality is menaced by the sword of Damocles: homosexuality, suicide, degeneracy, or criminality destroy him,-if some disease like pneumonia, scarlet fever, or tuberculosis has not already done away with him. Yet, if the condition is diagnosed—and that is simple nowadays by the X-Ray—it is absurdly easy to destroy the enlarged gland and thus rescue the personality from the doom that awaits a thymic individual.

## The Sex Glands

The sex glands are the testes in the male and the ovaries in the female. These organs lie dormant during childhood and at puberty are released from the yoke of the thymus. Until that time, boys and girls differ very little physically. But now the secondary sex characteristics make their appearance and the sexes go their respective ways; the boy's voice changes to bass, his bones become heavy, and he grows hair upon the face. The girl's skin remains smooth, her voice treble, her bones light, and the menstrual cycle begins.

These changes are due to an internal secretion of the sex glands, or gonads. This principle is elaborated by a portion of the gland called the interstitial tissue—the cells of Leydig—which make up this part of the gland and manufacture the hormone responsible for pubertal changes. Even if the remainder of the gland is destroyed by X-Ray and the individual rendered sterile, the cells of Leydig continue to function, the sex characteristics develop, and sex life is normal; but any union of such persons will be sterile—indeed, the victims will have no intimation of their inability to fertilize.

Mankind has always been familiar with the vagaries and variations produced by sex gland deviations. Removal of the glands from animals has been used by farmers for their wn purposes; bulls are converted into oxen and cocks into capons. Oriental potentates castrated boys and men to make eunuchs who would guard their harems and look upon their wives without desire. The Skoptzi of Roumania. a religious caste, are castrates who illustrate the effects of sex gland removal: if mutilated in childhood, they become slender, tall, broad-hipped, and have the feminine "girdle of fat"; if the sex glands are removed in later life, they become short and very fat, and also have the broad hips and "girdle." Among the Aztecs, a religious sect called the Mujerados were artificially produced; they wore women's clothes, were treated like females, and were regarded with religious veneration.

The first group have a sallow and wrinkled skin and high-pitched voices; they are soft-muscled, small-boned, and large-breasted, and their sex organs are infantile. They are timid, laugh and cry easily, are sentimental, and are prejudiced without reason. They are the *eunuchoid* type, seen wherever the testis has failed to develop: they are caricatures of the female. Lacking a normal sex outlet, they easily tend to homosexuality.

His "difference" forces the eunuchoid to keep to himself and his kind. Infantile behavior characterizes the group. They lack an adult conception of morality. Their lives are lonely and away from ordinary people, who delight in ridiculing them. Even in prisons, the authorities isolate them to protect them against the jibes of other inmates.

Treatment by gland transplantation—"by monkey glands"—has been used chiefly in individuals desiring rejuvenation. While "monkey glands" have been ridiculed, there is considerable evidence to show that increased mental and physical health has not infrequently followed these operations. As our knowledge of this endocrine increases, we may hope for more constant results; while no one expects renewed youth, it may be possible some day to make senility a period of vigor instead of decline and deterioration.

In the female, the ovary has an interstitial portion like the testis of the male that brings about her secondary sexual development. The internal secretion coöperates with the thyroid and thus controls the growth of girls. Premature puberty in girls checks their bony development and results in short-legged and long-bodied women; delayed puberty causes the reverse.

The ovary determines the menstrual cycle and the sex life of the woman; it secretes the ova or eggs which are our ancestors. It may be transplanted to any part of the body with normal function except that the possibility of conception is removed. Underactivity of this gland in young women is seen first through scanty or irregular menstruation. Feeding or injecting the gland extract has saved thousands of women from the mental and physical disorder that follows.

Jane Carter at seventeen menstruated irregularly. She was undersized and backward mentally. Her childhood development had been abnormal; she did not walk until she was two years of age, nor did she talk until she was two and a half; and her mother noticed that she was small for her age. She liked to read and was fond of music. Though she went to parties, she would not dance with boys and was never interested in them like other girls. She knew nothing about sex and its relation to life. She was short-legged, long-bodied, and looked fourteen instead of seventeen. Her skin was coarse and pimply, her hair dry and thin, and her blood pressure was low.

Ovarian feeding was begun, and within a year she changed completely. Her menstruation became regular, her skin clear; her strength and ambition increased, and she acted like a normal

girl in her attitude towards boys.

Thus personality changes due to sex gland abnormalities may be removed if early diagnosis and treatment are instituted. More often the condition is latent and unrecognized; over a period of time mental mechanisms come to be added to the glandular basis, and recovery does not follow with gland treatment alone. The refusal of enthusiasts to recognize that an individual may have an ovarian insufficiency and a neurosis as well, has prevented more than one sufferer from reaping the benefits of modern medicine, which sees disorders often as the result of two or more factors.

## The Adrenals

The adrenal glands, mothers of heroes and cowards, are shaped like large beans, and are two in number, each being astride a kidney. Each gland has two parts, a cortex, or shell, and a medulla, or core. These are united in man, but in some lower animals are found separate. They are yellowish, and because they resemble fat, they were for centuries mistaken for it and denied any importance. We now know that they rate close to the brain in the development of men as individuals and as a race. If they are removed in an animal, death follows quickly; if they are destroyed in man by a tumor or by a disease like tuberculosis, progressive weakness, convulsions and paralysis, and heart failure result in a short time. Even in man they form different hormones and play different rôles; but since they are spoken of as a single gland, we shall treat them as such.

The cortex, or outer part, originates in the embryo from the same area that produces the sex organs. This fact is important, since their common ancestry enables us to understand why the cortex is so closely related with sex development and sex life. Another function of the cortex, as determined by Marine, is to inhibit the heat-producing activity of the thyroid (injection of adrenal cortex will lower body temperature). Human beings have the largest cortex of any animal. It is interesting that rabbits possess a thin one: their timidity or lack of courage is due to this insufficiency and may be interpreted as a protective arrangement by an all-wise Nature. Were the rabbit liberally endowed with cortex, he would stand up and fight larger animals and become extinct, since he is not physically equipped to do combat.

The internal secretion, or hormone, of this part of the gland has recently been isolated and is called *cortin*. Oversecretion of cortin before birth results in a male developing into what looks like a female, or *false hermaphrodite*; conversely, females with this condition grow into creatures

that seem like men. As a freshman in medical school, the author had occasion to dissect the body of a supposed male, and only when he discovered ovaries did it become evident that the individual was a woman. The history showed that the deceased had lived the life of a male!

Too much cortin in childhood, sometimes seen as being due to a tumor of the gland, hastens puberty. The author has seen a six-year-old girl who looked thirteen: she had large breasts, menstruated, and had the intellect of an adult. Also, a seven-year-old boy with a similar oversecretion became a miniature man in a few months: his muscles, sex organs, and attitudes became adult—a condition characteristic of the "infant Hercules" type. Both these metamorphoses are due to the sudden pouring into the blood stream and the absorption of an excess of cortin. Maturity within weeks!

If this phenomenon takes place after puberty, say, in a woman of twenty-five, she will grow hair in the beard and mustache region, her voice will change to bass, and her muscles will become masculine; her mental attitudes become those of a man, and all the feminine traits disappear.

In all cases of oversecretion of cortin due to a tumor, the period of early maturity or of other changes due to overstimulation are succeeded after a variable period by a decline. The obesity lessens and the muscular strength gives way to weakness. The aggressiveness and pugnacity and the increased sex drive are replaced by depression and by sexual indifference; then come increasing weakness and convulsions, and finally death. Cortin is also concerned with brain development. In the embryo, the cortex is very large and determines brain growth. If cortin is lacking in infancy, development of the brain does not follow, and idiocy or imbecility results.

The cortex also controls the pigment cells of the skin; when the cortex is diseased, as by tuberculosis, darkening, and later a bronzing, takes place: the color control has been lost. This condition was described by Addison, who first called attention to the endocrines. Addison's disease produces progressive weakness, low blood pressure, pigmentation of the skin and mucous membrane, and ultimately death. Since the recent discovery of cortin, newspapers have carried stories of how this substance has been rushed by airplane to rescue some victim of Addison's disease from the brink of the grave.

The medulla, or core, is made up of cells belonging to the sympathetic nervous system and of *chromaffin* cells; the latter are so called because they stain a brown-yellow when fixed with potassium bichromate. They are the most important part of the medulla because they secrete the hormone, *adrenalin*.

Adrenalin, which was recently prepared in the laboratory, is one of the most vital of our secretions and probably accounts for the survival of the human race, since it helps us to flee danger or gives us the pugnacity to stand and It is a poison in a small quantity and acts as such in the skin glands of toads, where it is found. It is contained in the blood in the proportion of one part to twenty million, but much is stored in the medulla as a reserve for body emergencies: disease, exercise, and emotional disturbances diminish this reserve. Rage, fear, and pain will cause an outpouring from the gland into the bloodstream. Adrenalin also causes an increase in muscle tone, raises the blood pressure, and removes glycogen from the liver: it converts the glycogen into sugar, which serves as fuel which the organism needs to react adequately to the danger or other stimulus that produced the emotion of anger or fear. The heart pounds, all the senses are sharpened, the temperature rises, sweat pours out, and the brain is alert. Combativeness, in man or animal, is determined by the size of his medulla and by his ability to "adrenalize"; the weak and the timid have a small medulla.

The James-Lange theory of emotions would consider adrenalin as the creator of the emotions of fear, anger, and rage: the gland is the means by which attack or retreat, protection or aggression, life or death for humans has been decided through the ages. This secretion determines who shall be the hero and who the coward. Understanding this, we should feel more liberally toward the unfortunates who by nature are incapable of overcoming their fear reactions and seek to avoid clashes of all kinds. Surely, it is no crime to be meek when you are weak. The rabbit would be a fool to fight a tiger. In combats between men, God is on the side of the one who carries most adrenalin; his must be the victory.

The adrenal gland is more important in modern life than it was one hundred or one thousand years ago. The complexity, the stress and strain and competitive aspect of the American scene drains and exhausts the adrenal in many individuals who might get along perfectly well in a world in which there was less noise, less competition for sustenance, and less rigorous standards of success. The premium on the acquisition of wealth has broken the adrenal of many. They are left in the noonday of their life with the fruits of success; yet without appetite or ability to enjoy them.

Many individuals do not govern their actions by their adrenal capacity, and their chronic insufficiency persists and gets worse. They prove to be the weaklings of life, muling and whining because their reach exceeds their grasp.

An acute insufficiency of the adrenal is a frequent aftermath of the high-pressure life. A typical history is that of

the "go-getter": A college athlete of great renown after graduation becomes a success as a bond salesman. He marries well, and every one speaks of his abilities and predicts a great future for him. At thirty, he is made a junior partner in his firm. But a year later his work begins to fall off; he wonders why he gets tired out in the early afternoon. He becomes irritable and worries; he loses his appetite, cannot sleep, and his feet and hands are always cold. His doctor tells him that he is on the verge of a nervous breakdown, and advises him to take a vacation. He does, and in a few weeks he is himself again. But within six months, the same symptoms return, and this time it requires a longer rest to revive him. Now he begins to suffer from indecision and has frequent attacks of the "blues." His physician begins to think that he is a neurasthenic and advises him to "forget it." But he can't; he finds himself utterly inadequate to keep up to the routine he once followed with ease. He develops all sorts of complaints in an inability to meet the demands of life; physically and mentally, he feels himself inadequate.

But he is not a neurasthenic. He is now suffering from a chronic adrenal insufficiency; the stress and strain of his hectic life have exhausted the gland. A year's rest brings him back, but he knows now that he has definite limits; his activities are measured by the strength of his adrenals, not by the force of his ambitions.

Adrenal insufficiency may be congenital or may become manifest in childhood. Youngsters suffering from it are those who do not grow physically or mentally. They are the despair of parents and teacher, upon whom their backwardness weighs. They are irritable, peevish; they cry easily, lack stamina, and are unable to play as normal children. They develop moles on the skin and lack appetite. They are considered high-strung—or lazy. Parents plague

them with all sorts of fads, and doctors and psychologists debate over them as behavior problems when in reality they need more adrenal cortex. They cannot learn because the lack of cortin has prevented brain development. When driven too far, these children become irritated at being asked to do what they cannot do; the conflict engenders neurosis, and thus sometimes they become criminals. Sometimes, after puberty, overaction of the thyroid and pituitary may compensate for the lack of adrenal, and the individual may be salvaged.

"Mannish" women are those who have an abundance of adrenal cortex. They are the athletic, aggressive females who look with something like contempt on feminine foibles. They are the career women, intensely alive, ambitious, and asking nothing better than to be considered as the equal of men.

The ideal adrenal character is one in whom there is a coöperation of the adrenal with the thyroid and pituitary. Such people have unlimited energy, vigor, and courage; they are the pioneers in all aspects of human endeavor, the builders of empires, the creative artists, the seekers after truth, the idealists who have the practical genius to make their visions reality.

# The Future of Endocrinology

We stand on the threshold of a new era; daily new discoveries show us the importance of the glands in the formation of the balanced personality. The scope of diagnosis of gland disorders is widening; the possibilities of treatment have scarcely scratched the surface. But at present, we must temper the enthusiasms of the unscientific—who see in the glands the answer to all ills—with caution. Our knowledge of the workings of the endocrines is still islanded in ignorance. We must never forget that, while

the glands influence personality, the personality also affects the glands: the relation is reciprocal and dynamic, not unilateral. Glands merely prepare a fertile soil upon which the conflicts of modern life may implant a variety of mental orders and disorders, as we shall see in a later chapter.

Taken by and large, the endocrines promise to do much for the human race. When we learn more about these arbiters of our destinies, their vagaries, and their wonders—and if we remember that they are but one of the factors of life and human happiness—then we may be able to bring about the miracles that the high priests of endocrinology prematurely claim are already possible.

#### CHAPTER V

# The Fiction of Normalcy

#### Neurotics in Our Midst

THE normal man is a fiction. The French, who gave us the first clear understanding of the neuroses, speak of the homme moyen sensuel; we call him the man in the street. No one has ever seen him or will ever see him. He remains a significant fiction, a synthetic creature possessing a maximum of desirable mental traits and a minimum of undesirable ones. But fiction though he is, as Vaihinger points out, he is necessary for us. We live as if he were real, and we level our conduct with him as an ideal.

The neurotics show us familiar faces; as in Hell, we see among them most of our friends. This group includes many more than psychoneurotics, or the insane, and because it contains ourselves, it is more interesting. Fortunately, most of us meet our conflicts and make a more or less successful compromise, and so we present to the world the faces and the behavior of happy and *seemingly* normal people.

Neurotics properly come between the normal and insane groups; but until some fifty years ago, the dividing line between neuroses and psychoses was very faint and frequently disregarded. It was only when medicine came of age and dynamic psychology came into being that the scales dropped from our eyes and we began to see clearly that the hysterics, the neurasthenics, and the psychasthenics are like ourselves. Here are no strangers, but rather the

reflection of our own faces and the echo of our own voices. Now we know also that, for the understanding of the insane, the wrecked personalities, there is no better foundation than to see how the neurotic, trapped by life, struggles against the inevitable.

## The Beginnings of Abnormal Psychology

Charcot, a Frenchman, was the first to give an inkling of the psychological basis of the neuroses. A brilliant figure, given to strong likes and dislikes, he bestrode the scientific world like a Colossus. He was the first to diagnose the illnesses of Heinrich Heine and Alphonse Daudet as locomotor ataxia, a disease due to syphilis of the spinal cord. He held clinics which were attended by the fashionable people of Paris—by writers, people of the theatre, artists, and curiosity-seekers. Charcot himself was a good showman, and his appearance was like that of an actor upon a stage. With the attention of his audience riveted upon him, he would sometimes hypnotise a row of hysterical patients. They were so well under his control that he had but to walk down the line and snap his fingers before each of them, and in a moment all would be in a hypnotic trance!

Short, bull-necked, thin-lipped and hawk-eyed, he strode the platform of the Salpetrière and cracked his whip like a ringmaster in a circus. And under the lash, his faithful performers would put on their act: here a woman ran on all fours and barked like a dog; there a man flapped his arms and cooed like a dove; in another corner, an old man brayed like a jackass. Like his audience, the patients came from everywhere. Most were, undoubtedly, real hysterics; many were, too, exhibitionists enjoying their hour in the sun and happy to demonstrate the power of the master. Some were ever ready to fall in an attack of

grande hysterie and demonstrate the master's three stages: lethargy, catalepsy, and somnambulism.

Now while these "stages" of Charcot's have proved to have been something of a hoax, like many other happenings at his memorable Tuesday matinees, Charcot did give us the first psychologic interpretation and was also the first to use hypnotism scientifically. Hypnotism had fallen into disfavor, owing to the mistakes of Mesmer and to his theory of animal magnetism, but in Charcot's hands it came to mean an instrument that could either produce or eliminate the symptoms of hysteria. Charcot believed that hysteric manifestations were caused by a morbid idea, and that they were responsive to suggestion or hypnotism. He also thought that hypnosis indicated a "degenerated" brain, although we believe today that under ideal conditions anyone can be hypnotised.

Bernheim of Nancy, who was anathema to the choleric Charcot, improved upon Charcot's explanation of hypnotism and its relation to hysteria. He substituted verbal stimuli for sensory stimuli in producing hypnosis; instead of making passes and having people gaze into mirrors or crystals, Bernheim talked them into a hypnotic trance. He saw that what followed was a result of suggestion, and that the human mind will accept even false assertions if they are made with authority and if the recipient offers little or no resistance to the suggestion. He found, too, that hysterical people could produce symptoms in themselves by auto-suggestion, this explaining how they came to suffer from paralysis of various parts of the body and from different disturbances of sensation. Bernheim gave the first completely psychologic interpretation of the neuroses.

Next in this great French tradition was Pierre Janet. Like Charcot and Bernheim, he used hypnotism to determine the causes of hysteria and psychosthenia. He saw mental life as a broad river of consciousness, which shock, stresses and strains, and emotional upheavals could divide into two parts: a conscious and an unconscious mind, working at different psychic levels. He believed that this happened only in those who had an inherited or an acquired weakness of the nervous system, and that the result was a neurosis or a dissociated (split) personality. However, it will be noticed that Janet, like his precursors, did not even hint at the idea of inner conflict, a concept that is the very cornerstone of the problem of the neuroses and psychoses. The conception and development of this idea, which brings in the all-important concept of motives, was destined to come from Freud and the dynamic psychologists.

#### The Behaviorists

The physiological psychologists, to whom we owe the modern mechanistic conception of the neuroses, appeared next. Following the establishment of the first psychological laboratory by Wundt in 1879, Pavlov became famous. To him we owe our knowledge of the conditioned reflex, a fundamental process to which he called attention by a simple experiment. He showed a dog a piece of meat, thus causing it to salivate, and at the same time rang a bell. Gradually, he withdrew the meat but kept on ringing the bell; and, after a few trials, he was able, without showing the meat, to make the dog salivate by ringing the bell.

Pavlov proved that many reflexes could be so conditioned. Watson, the behaviorist, and Bechterev, have used this fact to explain the neuroses as well as normal behavior. Personality is for them merely a matter of hundreds of integrated reflexes; the neurotic is one with badly conditioned reflexes or poor habit patterns. Life,

however, is not so simple that it can be reduced to a formula; nor the neuroses to an explanation that leaves out of account such forces as conflict, purpose, and goals compatible with reality.

Pavlov, an octogenarian, still lives in Soviet Russia, where his work is greatly esteemed. It is interesting to note that the official philosophy of Sovietism has made good use of the conditioned reflex. Soviet educational theory sees the process of learning as, essentially, the conditioning of reflexes, and it hopes to build the character and personality patterns of communistic youth accordingly.

# The Freudian Concept

The study of morbid mental processes flowered in Freud. It was he who gave us a complete picture of the causes, the development, and the treatment of the neuroses upon a purely psychological basis. He freed them of the shackles of anatomy and physiology. In the place of demoded shibboleths, he gave us a new vocabulary to explain the dynamics of the neuroses. Most of all, he showed the relation between emotion, motives, and mental disorders.

Freud soon discarded hypnosis as a method of studying mental ills. Quite by accident, he discovered the value of the "talking-out," or mental catharsis, approach. Thus, the neurotic was led spontaneously to reveal ideas, motives, and unpleasant experiences long-forgotten and to voice cravings he himself did not know he possessed. Freud, by piecing together these fragments and subjecting them to analysis or interpretation, was able to form a coherent picture of what had been and still was going on in the individual's "psyche." He soon realized that he was dealing with something more than meets the eye. Where did these wishes, ideas, frustrations come from? Obviously,

the patient himself was not aware of them, and they could not be part of his conscious mind since they appeared only in "talking out" or as symbolized in dreams.

Freud's reasoning led him to the concept of three psychic levels, comparable, though not equivalent, to the cerebrocortical, thalamic, and spinal levels of the nervous system: the unconscious, the conscious, and the preconscious. It had long been known that mental processes existed outside of the field of attention. Schopenhauer spoke of the Unconscious Will; Nietzche of the Will to Power and of other unconscious motives which determined human behavior; Janet—as we have seen—of a subconscious split-off from the conscious in neurotics. But Freud visualized the unconscious as the major part of the psychic life of the individual. Here are stored ideas incompatible with reality (complexes), wishes, cravings, unpleasant and forgotten experiences, instinctive tendencies, and fantasies. No laws of logic rule in this land, since it is not in contact with reality: here a man can have his cake and also eat it.

The unconscious is governed by the pain-pleasure principle; this means that life is ordered by a desire to secure pleasure and to avoid pain. It dominates the conduct of the individual by the energy drawn from occupants of its domain; all the drive from sex and other cravings is harnessed in the service of the unconscious and used to push the individual on to a goal; he is on his way, but he does not know where he is going!

The psyche is invested with a certain amount of tension derived from the energy of the primary drives, such as sex, hunger, and thirst. Relief of this tension by gratification of these cravings leads to a feeling of pleasure; frustration increases the tension and gives a sense of pain. As the individual grows, his ability to enjoy and to suffer grows; the greater the heights, the deeper one can fall. Thus,

pleasure-pain is the primary principle, dominating the activity of the unconscious mind.

On the other hand, there is a secondary system: the reality principle. This represents the obstacles opposed to asocial desires, the denial of goals incompatible with the group welfare; it speaks in the name of humanity, society—yes, even God! But it has to reckon with reality. When pleasure cravings come into contact with reality, pleasure gives way if necessary, for the greater good of the individual. And this craving goes to hide in the subcellar called the unconscious.

The conscious is the part of the psyche which is an open book to the world; it acts as a mediator between the unconscious and reality. It is spurred by the dynamics of the former and is stimulated by the latter. Here a man thinks; this is the sphere in which his deliberate behavior is determined.

The preconscious is the psychic limbo—the No Man's Land of the mind. It is the gate guarded by the psychic censor. The pleasure-pain principle operates here and determines which ideas shall be banished to the unconscious, which shall be admitted to the conscious, and which are to remain in contact with both. Here is where resistance is encountered when the analyst begins to fish in the unconscious to hook the complexes which cause a neurosis; here repression submerges in the archaic ooze desires and feelings in conflict with reality; here dwell the motley crew of the underworld.

### Mental Conflict

Many of Freud's concepts have illuminated the darkness that invested the neuroses before he exposed them to psychological dissection. Such are the concepts of sublimation, transference, identification, ego, super-ego, regression, complexes, fixation and, above all, conflict. Struggle is the stuff of which all life partakes; all nature mirrors the combat.

The struggle begins before the child is born. Within the fœtus there begins what is known as the "struggle of the parts." By this is meant the battle of various organs such as the heart, the liver, and the kidneys, to outstrip one another in development, in which fight it is the victor that gains growth. The perfect body represents one in whom the victory went to no one organ; all shared equally in the laurels. Geoffrey St. Hilaire recognized this conflict first and labeled it Le Principe du Balancement des Organes. A German observer called it Kampf Der Teile.

The next battlefront lies within the mind of the infant. The home socializes his instinctive cravings. Hunger is stilled by his mother's breast or by the bottle; his excretory functions are disciplined according to a standard of social expediency. Against any obstacles raised by society to his direct desires, the infant rebels at first; but a system of rewards and punishments teaches him the value of submission, and he gives up a hopeless struggle. As he grows older, the desires of his ego are in conflict with the mandates of his super-ego, or censor, which is the voice of the group laying down the law to him; and this, too, he learns to heed in most instances. Human beings usually take the path of least resistance. Only the criminal and the genius have the courage to transcend the demands of the social order.

Soon the child finds conflict in love for one parent and jealousy of the other. Thus, sons may desire their mother and harbor unconscious, but none the less real, hate for their father, who is their rival for the mother's affection. This Freud called the *Œdipus complex*, alluding to the Greek tragedy "Œdipus Rex," of Sophocles. Daughters may fix upon the fathers, this being known as the *Electra* 

complex, also alluding to Greek tragedy. How these conflicts are resolved, is discussed in later pages.

The next plane of conflict is between man and man, in athletics and business and in the competition of social life and of desires for honors and recognition. Then, too, there is the struggle between man and woman. Strindberg has called attention to the "battle of the sexes." Thus, husband and wife are in conflict. What is modern marriage if not a struggle by each spouse to dominate the other? Subtle, masked, but often frank, it makes for much of the unhappiness of life and is an important factor in precipitating mental disorders. True, this is a man-made civilization. But civilizations have not always been so; and the age of the matriarchs may be returning as a result of the twentieth-century emancipation of women.

The conflict is also one of groups. Communities, organizations, and social units of various sorts are in constant struggle, and nations battle with one another in war and in peace. And, finally, man is in conflict with the universe. Daily the food supplies, the coal, oil, iron, and the heat of the sun are diminishing. A million years, ten million years, perhaps a billion years—and the earth will no longer support the life it created. The battle of man against his universe will not be to the strong, but to the swift; for time wins all conflicts.

There is still another factor that makes for conflict within the individual himself. This is what Bleuler has called ambivalency and ambitendency of ideas, meaning that all concepts have two feeling tones, their own and their opposite. Thus, love contains a notion of hate, black of white, good of evil, and hot of cold. At times, there may be a dissociation, and both ideas are set loose to cause a turmoil; the individual tries to express two contradictory ideas and his conduct is held irrational. An example of such a condition follows:

Mrs. Anna Jones died and left all her money in trust for her daughter, Jane. But the will was drawn so that Jane was unable to get the money for many years, and got it then only by devious legal steps. The explanation is that Mrs. Jones was expressing two wishes in her will. She showed her love for her daughter, a conventional gesture, by leaving all her money to her. She showed her unconscious hate by tying the money up and making it difficult for Jane to receive it.

In the body, we can see a physical counterpart of this concept. The sympathetic and vagus nervous system are diametric opposites in action; yet perfect health obtains only through an interaction of these two antagonistic forces. The notion of a synthesis of contrary ideas seems to be in the nature of things. This helps us to understand why a hysterical woman often wounds the one she loves best.

Sarah Bolton found out that her husband was running around with another woman. She took to her bed, knowing illness would make him sympathetic and win him back. It did. Then Sarah developed a paralysis of both legs. Many doctors examined her, but finding no organic disease, shook their heads and muttered, "Hysteria." For twenty years, Sarah remained in bed, unable to get up. Her husband's attention and affection was the talk of the town. Then, after her husband died, Sarah got up and hobbled about. The case was of hysterical paralysis. Sarah paid for the thing she wanted most with the results of a conversion hysteria.

Conflict is, as we have seen, the result of group pressure. We are born into a world for which we are not fit. Our primitive desires are direct and antisocial; an infant or an untrained man grabs for the food he wants, exercises excretory functions, and otherwise behaves as if only one being counted—himself. But the group soon makes its demands felt. If you want money, you must earn it; if you want food, you must pay for it; if you want a woman, you must marry her.

Successful living, which means, in essence, personality balance, consists in substituting higher and higher levels of conduct, in exchanging such goals of the appetite as sex and hunger and thirst for ends more important to society and less selfish in character. Society seeks to depersonalize the individual and to secure an identification of him with itself: it substitutes respect for property for the desire of personal gain; it teaches sacrifice of personal ambition for the common good; and even life itself must be ready to be offered for the maintenance of social integrity. The stronger the cravings of the individual, the more intense the conflict and the more difficult the adjustment. The diversion of the streams of primitive energy away from instinctive cravings and toward higher goals is the process of sublimation. Upon this process rests much of the art, religion, and other systems that are the mark of a civilization.

The war between the conscious and the unconscious may have any of the following results:

- (1) Successful repression and social adjustment.
- (2) Inadequate repression and maladjustment, or neurosis.
- (3) Compromise.

Inadequate repression, which is a common phenomenon, may show itself in certain dynamisms, such as identification, transference, rationalizations, undesirable traits. To these mechanisms of partial adjustment we now give our attention.

#### CHAPTER VI

# Maladjustment

## Mechanisms of Maladjustment

BEFORE we proceed to an analysis of mental disease and personality disorders in the light of modern psychiatry, it is well to examine first the mechanisms which color the picture of these conditions. These mechanisms are the psychological processes through which the sufferer manifests his conflict even when attempting to hide his affliction. Without an understanding of how they operate, no clear perspective of the field can be obtained. Often these processes are not obvious and may be obtained only by some special technique such as a psychoanalysis or a study of the dream content. On the other hand, they may be so manifest that they impress and irritate the casual, lay observer. Who of us does not know, for example, the short man who wears high heels, struts like a peacock, and assumes a domineering tone, thus compensating for an unimpressive physical personality?

### Compensation

Compensation is, as we learned in preceding pages, a universal process and is as old as the human race. It is probable that Cain slew Abel as a compensating sop to a pride wounded by his parents, Adam and Eve. And since that time people have been bending backward trying to prove to themselves and to the world that they are what they really are not.

Adler popularized this principle and preached its universal dominance. We remember how the human body shows this mechanism operating on an anatomic basis: if one kidney is diseased, removed, or is absent at birth, the other will enlarge and perform the duty of both; if one lung is diseased and incapacitated, the remaining lung will function for both; and should one chamber of the heart fail to do its duty, the others will enlarge and take over the task. is called compensatory hypertrophy, or enlargement in response to a need. Now from this anatomic evidence, Adler deduced a similar condition in the psyche. He observed individuals with physical deformities compensating psychically for their bodily inferiority. Thus, he insisted Mozart and Beethoven became musicians to compensate for their deafness. He found painters and sculptors who, he claimed, were led into that field to compensate for failing eyesight. It is true that in medicine many advances have been made by men suffering from a particular disease themselves. Much of the pioneer research in tuberculosis is due to tubercular physicians.

What matter if this principle may be carried to a logical absurdity? What if we find that Rimsky-Korsakoff by virtue of his visual deficiency should have been a painter, not a great musician? It suffices that many examples can be adduced to show that this mechanism is very often the explanation of personality deviations that otherwise could not be explained. Compensation is the means by which the poor and the miserable have sought relief from a reality too sordid to face. It often relieves the devitalizing inferiority complex. Witness the member of a racial minority group:

Sam Bloom had had impressed upon him that he did not belong. He was white, but not blue-eyed; blond, but not dolichocephalic. And the Nordics were the kings of the roost. As a child, Sam began to develop shyness, to blush and stammer when

spoken to, and was uncomfortable in the presence of his supposed superiors. But as an adult, Sam saw the explosion of the Nordic myth and took heart. He began to see himself as the equal—yes, at times even as the superior—of these "lords of creation." His friends soon began to notice a change in him. He lost his hesitancy and self-consciousness, and he radiated confidence. No longer did he feel embarassed in the presence of those not of his own race. The feeling of inferiority dropped away from him, and it was noticed with surprise that he no longer thought of people as belonging to this or that group. In fact, it was only as an after-thought that he thought of Jones as being a Protestant, Smith a Catholic.

This individual had compensated. His manners had become those of the dominant group, and so he was accepted.

The following case illustrates overcompensation:

David Goldman was not as fortunate as Sam. Like Sam, he began life with a feeling of inferiority which manifested itself in embarassment, blushing, stammering, excessive timidity and a feeling of being an outsider. David day-dreamed of a time when he would be wealthy and famous and these Nordics would have to acknowledge him as their equal—yes, as their superior!

Compensation had thus already begun its work. Like rain, it often falls upon the most parched soil. David slaved and denied himself. Always he had but one goal in mind. He'd show them. What was it that made the difference between those who "belonged" and himself? Money, of course. If he could have clothes, a home like theirs, and learn to talk in the tone of one accustomed to things, he too could belong. He'd get the money. Yes, and he would be able to buy them and sell them. Only he would have so much that he wouldn't need to sell them! David laughed in excitement as he thought of the day.

Finally, he achieved his goal and was rich. He had everything that money could buy, and his children went to the best schools. Still, he saw the same ill-concealed disdain in the eyes of those to whose position he aspired. He was puzzled. But not so with the world. David, too, had changed. The shy boy had become the aggressive, argumentative, over-confident, blustering

man. He had done well—too well.

David had *over*compensated; too much compensation is sometimes worse than too little.

Another instance:

Adam Cabot was an honest man. Everyone said so, telling the story of how he had walked miles to repay a customer whom he had "accidentally" short-changed. He paid his bills promptly, and none could accuse him of anything which savored of trickery, even in a community where shrewdness in bargaining was looked upon as a virtue.

When Adam died, papers were found in his effects showing that Adam's father had been a convict. Adam, too, had served a term in prison before coming to the community where he had made a reputation for integrity. His exaggerated rectitude could now be understood: he had lived in constant dread of a possible exposure of his past, and thus sought to build up a reputation for super-honesty against the possible coming of the "evil day."

The case that follows is representative of the extreme of *under*compensation:

Jones was a failure. Worst of all, he knew it. His family treated him with studied kindness and infuriated him. Why? he often asked himself. Wasn't he as good as the next fellow? Well, perhaps he wasn't. But at least he did his best, and you could not ask anything more of anybody.

Jones often thought of Dick, his younger brother. Now there was a successful man: everything he touched seemed to turn to gold. Jones felt a pang of envy, but he hastily quenched it. For Dick was a "prince." Hadn't he helped out when Mrs. Jones had to have that operation? Also, he had helped him in his own sickness.

But the story of Dick and Jones was that of Jacob and Esau. Not that Jones knew it—consciously. But in similar manner, Dick had stolen his birthright. Dick was born years after; and Jones was at an awkward age and more of a nuisance than an interesting child. The parents had lavished all their affection upon Dick, and Jones, wounded in his childish soul, bore his hurt in silence. He heard Dick's praises chanted by everyone; no one thought to speak about him. Although he was not a

bad scholar, his work began to fall off. Dick, encouraged by everyone, proved to be the brightest in his class all through school. So things went until both brothers entered business after leaving college.

For a time, Jones realized that he was allowing the sun of his brother's brightness to eclipse his life, and he made a determined attempt to make good in his own way. But a stroke of fortune made Dick the most talked-of man in town. Jones felt something crack within him. Despite the fact that he too had done well, nobody seemed to recognize him. So, when an opportunity was offered to Jones to manage a branch office in another city, he refused, pleading ill-health. In reality, he was afraid to face the responsibility. Suppose he should fail? Wouldn't people say that if it had been Dick—? No, he could not chance it. Soon, he began to complain of minor ailments, headaches, pains, and aches everywhere in his body. Doctors examined him, and, finding nothing, murmured, "Neurasthenic." But not loud enough for Jones to hear.

Jones had had impressed upon him an inferiority complex by stupid parents and relatives. Compensation had set in to remedy it. But, failing, Jones had found escape in a neurosis.

Sometimes compensation takes the special form of day-dreaming, or autism, as Bleuler calls it. The story of Cinderella is an example of it. In the heart of all the miserable, there is the hope and longing which identifies them with the adventure of the fairy princess. Without it, undoubtedly, many would commit suicide. The movies are popular chiefly because the plain and the poor can experience a vicarious joy in the spectacle of the simple working girl who becomes a great beauty and rises to high estate through virtue. To us, the trials and tribulations of the heroine are our own; we are sure of her final success. Of course, we must be.

Day-dreaming is part of the normal mental life of every individual. It may, however, exist in exaggerated form

and work serious injury to the personality when unchecked at the usual limits. It is sometimes an adjunct to the mechanism of compensation, and through fantasy formation it gives the ego a satisfaction denied it in reality. It is more common in the child than in the adult and also more common in the primitive man than in the civilized. The extrovert, the open and frank type, day-dreams less than the introvert, the shut-in personality. Within limits, day-dreaming colors the whole of life and is responsible for the pleasure yielded by a vivid imagination. Without it as a progenitor, poetry, drama, literature, music, painting, and even science, would be sterile and lack richness and vitality.

On the whole, it is more necessary and less harmful to the child than to the adult. To the young it affords an outlet where desires may be gratified and the ideal world made true. Here every child becomes king; here he can become Napoleon, Washington, or Babe Ruth; here all things are possible. But the danger lies in the withdrawal from reality which excessive day-dreaming imposes upon the personality. This is often the first sign of an incipient dementia praecox reaction. The child begins to avoid his playmates and to seek his room, or feigns illness. can indulge to his heart's content in the ego-satisfying fantasy formation. When a youngster begins to manifest this avoidance of society, the danger point that separates healthful day-dreaming from the morbid fantasy stage has been reached. Such a child must in one way or another be enticed to reënter the social atmosphere lest he suffer a serious personality disturbance.

As the child grows older, there is less need for day-dreaming as an aid to the development of the powers of imagination. The danger at adolescence lies in the temptation to exchange for the expedient day-dream the opportunity to make a success in real life. At this point, the child is asked

by society to give up the parasitic existence of living completely through his parents and to shift, at least in part, for himself. Thus confronted, the weaker personality often chooses the available substitute of the day-dream for the prospect of struggling and perhaps failing to make good.

In adults, day-dreaming, beginning as a retreat from reality, becomes increasingly the avenue for the expression of repressed tendencies. Herein lies the danger: individuals dissatisfied with reality turn their thoughts and desires inward. By increasing absorption in this fantasy world, they lose contact with their environment. Soon nothing matters but the delight and ego-satisfaction possible only in morbid day-dreaming, and the outside world is well lost. So they go on to join the dementia praecox ranks—an army that recruits 30,000 yearly.

Probably the greatest harm that comes from morbid day-dreaming is that it facilitates asocial or criminal action when the circumstances in real life parallel those so often conjured up in fantasy. Such was the case in the notorious Loeb-Leopold affair.

Leopold was a youth of extreme brilliance; but his personality, warped in its development, led him to day-dream of crimes brilliantly executed by him and going without detection. Often he pictured himself walking the streets and glowing with triumph while the city hummed with the gory details of his latest exploit. Who was this master mind that defied the police of two continents? He pictured the citizens hiding in terror and frightening their children with the name given him by the press. He chuckled. Never had there been anyone in the history of crime who had struck so boldly and walked with such impunity through the clumsy snares of the police, duped again and again by his all-seeing brain. The world wondered who the murderer was. He alone knew. They

would never know, the fools! And again and again he acted out these scenes in his day-dreams. Always he was the hero; always he escaped unscathed. Small wonder then, that, when the opportunity presented itself, the force of accumulated planning produced a crime that shocked the nation.

Such is the greatest danger of morbid day-dreaming. It often furnishes the initial force that sends the human snowball hurtling down to the chasm that yawns beneath the feet of all of us.

## Repression

The doctrine of repression is the foundation stone of the psychology popularized by Freud and his followers. But, like many other ideas, it was not discovered by them, but rather rediscovered. Plato himself recognized and wrote about repressed desires that submerged themselves in the sub-surface of the mind and paraded through the individual's dream to haunt him like the specter of Banquo at the banquet.

Repression depends above all upon the concept of motives that determine human behavior. The realization of this concept was a sad blow to those who saw life mechanistically; who attempted to explain our social reactions in terms of body secretions which led us to marry Jane or Frances, to go to college or to enter business, to follow the law or go into the ministry. We have come to understand repression through the introduction by Freud of his psychoanalytic technique. Simply stated, this is but a method for getting at that material hidden in the sub-cellar of the mind that shapes our daily reactions, colors our desires, and drives us toward goals, often without our being aware of the path we are taking.

Freud's first experience was with a woman suffering from a nervous condition who cured herself by "talking it out," or by mental catharsis. Confession, everyone knows, is good for the soul. And so it proved with this lady; for in the course of her ramblings, which took days, she revealed many facts which she did not know were fundamentally related to her condition. Freud learned from her that mental ills are often caused by more than meets the eye. Further, he soon saw that what appeared on the surface rank statements made by people—have a definite relation to what was going on underneath. Physiologists found the same to be a universal principle governing all living things. This they expressed as the surface interior pattern; in other words, what happens inside of a simple, even unicellular, organism is determined by what the surface permits to go through; conversely, how the surface reacts to the external environment is determined to a large extent by the interior of the organism.

Thus Freud's first formulation has a physiological basis—a point which his decryers and villifiers either do not seem to know or refuse to acknowledge. Freud soon discovered that dream analysis furnished the best way to approach the dynamic factors determining people's behavior. In the dream content he found the forgotten experiences of early life, desires and their frustrations, conflicts and their repressions. Not that he was the first to see in dreams the key to the riddle called life. Even among the Greeks, the Delphic oracle gave the solution to individual and national problems by analyzing obscure dreams. All peoples in all times have had recourse to the dream to explain many of the mysteries of our existence.

For Freud, as well as other dynamic psychologists, life and human conduct are motivated by *drives*. He calls them the *libido*, meaning "desire." The drive causes tension within the psyche until it is either gratified or repressed. The libido at birth is interested in the individual itself; but as we grow old, social pressure conditions it until many learn to substitute the good of the group for their desires—yes, even for their own lives. Such are the soldiers who die for their country; the martyrs who give up their lives to bring salvation to others; the scientists who offer up their existence upon the altar of the advancement of human knowledge.

But the libido, or desire, does not always travel in a straight line towards its goal. Very early, life situations and society itself offer resistance and obstruct its path toward gratification. This is apparent in the blocking of the sex drive. However, some conflicts between instinctive tendencies and the conditions imposed by the environment, result in compromise. And it is this compromise alone that appears in the conscious and is known to the individual. Indeed, at times the conflict may go on with the individual himself unaware of the struggle. Repression is essentially the withholding of wishes from one's own consciousness.

### The Escape from Repression

Repression is not an isolated phenomenon. It constitutes a point of departure from which other mechanisms arise and act to color the patterns of human behavior; like charity, it covers a multitude of sins. Yet, wishes, fears, hates, loves and instinctive tendencies, like truth crushed to earth, must rise again. So these repressed desires break their chains and flee the prison of the unconscious into the free air of the conscious. But to make their escape they must mask or disguise themselves, else they cannot elude the vigilance of the ego ideal, or the psychic censor, than whom Cerberus himself was never more efficient.

To live in this new land, the escapers assume aliases. These are seen in:

- 1. Annulment.
- 2. Projection.
- 3. Identification.
- 4. Sublimation.
- 5. Neurotic symptoms.
- 6. Undesirable traits.
- 7. Rationalization.
- 8. Displacement or replacement—taking it out on some-body else.
- 9. Forgetting.
- 10. Accidents—slips of the tongue.

Annulment occurs when the psychic censor completely represses the painful or undesirable tendency so that its content is not found even in the unconscious; it cannot be elicited in either a dream analysis, an association test, or a "talking out," disguised or otherwise. In short, it has been legislated completely out of psychic existence. Many tendencies, however, are not annulled. They escape in disguise in many ways, one of the most common of which being projection.

La Rochefoucauld said, "We would not be so happy in finding faults in others if we did not possess them ourselves." Thus projection is one of the commonest of the masks used by repressed tendencies. Thus garbed, they strut the conscious world with the self-righteous indignation of the Puritan, the "holier-than-thou" attitude of the "one-day-a-week" Christian who will cast the first stone. It can do this with seeming logic because projection is a process by which the ego uses the ventriloquist's art; it "throws" its own voice and makes it seem to issue from the lips of others. The other fellow then utters our hidden

thoughts, our forbidden desires, our profane loves, our illicit hates. He therefore becomes the object of social censure, of disapproval, and we hope to breathe easier because we have shelved our sins on other shoulders. But often we are called upon to pay a severe penalty, for projection is a process which leaves behind it a mind in ferment, a personality in turmoil, a soul in torment. Frequently excessive projection is an early indication of the mental disorder called dementia praecox. Never indeed is the projector really at peace, for his unconscious seethes with the conflict he seeks to ease by his projections, and the waters of his conscious mind are troubled by the cross-currents that swirl and rush in the depths below.

Projection not only casts our desires upon others, but also it may impute our unworthy motives to the innocent bystander. The ventriloquist recognizes his own voice coming from his dummy; but not the projector. He lacks insight, and even when it is demonstrated to him by the psychiatrist beyond reasonable doubt, he refuses to acknowledge his guilt. This makes for great difficulty in correcting personality deviation; and sad to say, many who repress and project are beyond help; there are none so deaf as those who will not hear.

Mary Connell was a nurse. She went from one hospital to another, and always the same thing happened—she had to leave despite the fact that she liked her work. The reasons were something like these:

Mary admired the surgical skill of Dr. Jones. In fact, she talked a "blue streak" about him until the other nurses looked at each other meaningly and shook their heads as they hurried away. One day, however, Mary accosted Dr. Jones and accused him of seducing her. She upbraided him while he stared at her in amazement. Finally she began to hit him and to shout vile accusations at him. Two orderlies subdued her after a struggle, and Mary was sent to the psychopathic ward.

It was soon found that Mary was subject to auditory hallucinations and that her charges against Dr. Jones were groundless. It was obvious that Mary was suffering from dementia praecox. Evidence was obtained from other institutions showing she had had similar attacks. But, because she had not become violent. and because the other institutions had wished to escape undesirable publicity, the matter had been hushed up.

This case illustrates how the mechanism of projection works in its worst form. Mary had harbored erotic desires concerning Dr. Jones; but her psychic censor prevented her expression of such tendencies, since Dr. Jones had evinced no interest in her—in fact, he had known her only casually. Since it would have been considered unwomanly for Mary to give vent to her amatory tendencies without encouragement, Mary projected them upon the surgeon. her projections took the form of delusions regarding her seduction and auditory hallucinations consisting of alleged speeches made by the doctor to conquer her. Her attack upon him represents the self-righteous indignation which her conscious mind vented upon her own externalized desires, which she had attributed to him.

Hallucinations and delusions are common and convenient masks for projections of the insane. Thus, many suffering from submerged homosexual desires hear voices calling them "fag," "fairy," "pervert," and other derogatory epithets.

Hans Ortner was a middle-aged German father of a family, and unusually kind-hearted. He said of himself that he would not hurt a fly. He suffered, however, from a neurosis which gave him no peace; obviously, there was a conflict. But where? The following dream seemed to be the key:

"I walk with a high officer in the Russian army. Suddenly I notice it is the Tsar himself. A stranger appears with a sword and attempts to kill the Tsar. I try to get between them and

save the Tsar; but it is too late, and he is killed."

Dreams have a manifest, or obvious, content and express originally repressed ideas or wishes; and, by analyzing the dream and by association, the original ideas may be found. The Tsar was called "little father" by Russians and thus is identified as the patient's father. The stranger is none other than the patient himself; he represents the strange part of his personality which harbors a murder wish. Hans's conflict represents a hidden wish for the death of his father, who is wealthy and whose sole heir Hans is. His projection consists in imputing the murder to a stranger when the desire and intent is really in his own heart. tional disguise is afforded by making his father a former enemy (the Tsar). The sense of guilt about killing is relieved by the acting out of the part of a soldier, for whom the taking of life is considered moral; and the attempt by the dreamer to save his father is merely a hypocritical gesture, showing the mechanism of overcompensation, or a "bending backwards" as partial atonement for the gratification of a guilty wish.

Identification is a process frequently indulged in by normal as well as abnormal personalities. In the Victorian period in America, theatre audiences identified themselves with the hero or heroine in the play; applause of their virtues, tears at their sufferings, joy in their inevitable triumphs, were nothing more nor less than a vindication of their own characters. The universal appeal of the movies arises from the fact that the poor and down-trodden find their virtue rewarded in the last reel: the working girl does not succumb to the temptations of the seducer; instead, by her beauty and simplicity and love, she wins the heart of the handsome, rich young man and lives happily ever after. Virtue is always triumphant in the movies; rags become royal raiment when worn for virtue's sake!

Identification often takes the form of hero worship. A fancied physical or intellectual resemblance produces an intense admiration of a well-known figure and leads to an estimate of his genius far higher than is generally accorded him.

Pat Reilly is a well-known magazine writer. About five feet in height, he wears high heels and makes the most of his inches. Now at an early age, Pat became interested in Napoleon; and from the age of fourteen he has collected Napoleonic relics until, at the age of forty, he owns one of the finest collections in existence. He did this at a great sacrifice, for his income is limited, and Napoleonia are expensive. But Pat has often starved himself to obtain some cherished object even vaguely associated with the "Little Corporal."

When he speaks of his hero, his eyes glow with ecstasy, and he becomes vibrant. He will recount anecdotes reflecting glory upon his god, all the while licking his lips as he enjoys his vicarious feast. His friends are amused by his unconscious imitation of Napoleon's poses and the use of mannerisms characteristic of the dead Emperor.

Pat has a Napoleonic complex. Through compensation for a physical inferiority, he has now completely identified himself with the "Little Corporal."

Sarah and John Talbot had struggled from poverty to affluence. Denied the good things of life in their own youth, they overwhelmed their son, Robert, with their attention. At an early age, Robert was made to study the piano. He showed no aptitude, but by dint of cajolery and bribery, he continued practicing, with indifferent success. At eighteen, he was sent to one of the best colleges in the East, despite his desire to go into business with his father, and the fear of hurting his parents made him work hard enough to "squeeze" through and graduate. His diploma became the Talbots' proudest possession, and they hung it in their living room, where it was the first object shown to every visitor. Indeed, from early life, the Talbots, as friends noticed, lived in and through their son.

Many parents completely identify themselves with their children. Thus they experience vicariously all the joys,

sorrows, loves and hates of the young, who may capture many of the things of life which they themselves have missed. The universal desire of men to found a family, a dynasty, a tradition, is a form of identification with children. Thus, many hope to achieve an immortality other than that promised nebulously by many religions. Identification is often seen also in forms of delusions. Frequently the insane individual conceives himself to be Washington, or Lincoln, Napoleon or the Emperor Franz Joseph, Jesus or God.

Like day-dreaming, identification may be helpful to the personality when kept within normal limits. Many, by unconscious identification with St. Francis of Assisi, may practice all the Christian virtues; and a boy, patterning himself upon the ideal of a great statesman, may become a force for the betterment of society. Yet, identification is too often controlled by the immediate horizon. A boy brought up in the slums too often identifies himself with gang leaders and their deeds of daring and high adventure—which leads to his joining the vast army of criminals.

In those so predisposed by defective or biologically inadequate personalities, identification may exceed normal limits and accelerate the wrecking of the personality. Among the insane, this process is often seen as a part of delusions of grandeur. The mind losing contact with reality bathes itself in the glow of fantasy formation where all wishes come true. Rub the Aladdin's lamp of identification and you become at once Einstein or Babe Ruth, J. P. Morgan or Jack Dempsey, Jane Addams or Greta Garbo.

Sublimation is universal, since all social organizations enjoin repression upon the instinctive tendencies of the individual. Freud sees it essentially as the diverting of the sex drive into energy productive of goals approved by the group. Failure to sublimate is the frequent cause of a

neurosis; success often results in the noblest achievements of mankind.

The thwarting of Dante's passion for Beatrice Portinari diverts the stream of his creative energy and gives the world "Vita Nuova" and "La Divina Commedia." Spinoza, also frustrated in love, rises to supreme philosophic heights. Schubert creates the "Unfinished Symphony" out of a love spurned by Mitzi. Petrarch mourns his Laura in immortal sonnets. Alfred De Musset is "kissed on the brow by the muse of poetry but on the heart by the muse of tragedy," and so creates "Une Nuit de Mai" out of his ceaseless frustration in love. Jane Welsh Carlyle pays with a love-starved life for "Sartor Resartus." The example of women who take the veil after disappointment in love is too well known to need comment.

The surgeon may often be sublimating sadistic tendencies to cut, and many who enter social work as "big brothers" or "big sisters" are sublimating unconscious passive homosexual desires, thus converting socially inexpedient traits to traits acceptable to the group. An international banker has a wife who spends most of her time in sanatoria, and a son who is a dipsomaniac. But the banker goes merrily on, for his sex drive and affection have been sublimated in creating more money and in securing power. The wife of a university professor elopes with another man after twenty years of supposed happiness. The world is outraged and condemns the woman. Yet, could they look behind the scenes they might see a scholar, absorbed in philosophy and deaf to the call of love, and a woman, hungry for affection and unable to find consolation in philosophy.

For the most part, sublimation results from a thwarting or denial of the sex drive. It is not always possible for a man to club a woman and drag her off to his lair. More important, in the evolution of society the sex instinct or drive has become linked with other sentiments; with tenderness, reverence, and a yearning to win the imagination as well as to possess the body. There have been further complications in the introduction of private property and its inheritance; in the idea of the family as the cornerstone of the group; in a system of rewards and punishments of society for proper or improper behavior. Also other drives besides that of sex may be sublimated and the derived energy utilized for higher goals. Thus, a man may starve himself for years to secure an education for himself or for his son.

But conflicts between reality and the desires of ego, or the self, are not always successfully sublimated. Three possibilities lie before the sufferer from conflict:

- 1. Compromise and sublimation.
- 2. Flight into neurosis.
- 3. Aggression.

Flight from reality as a response to unconscious conflict results in neurotic symptoms. Where the struggle lies near the surface, in the No Man's Land between the unconscious and the conscious mind, a group of symptoms indicating a neurosis become manifest. The neurotic—so a student wrote in the margin of Adler's "The Neurotic Constitution"—is like a normal man, only more so. He wavers between two goals, two desires, two poles. Like the father and son in "Aesop's Fables," he tries to please both his ego and his psychic censor, or super-ego, but succeeds in satisfying neither. He oscillates between the Scylla of desire and the Charybdis of social submission.

Often the neurotic's control is lessened, and he may become the so-called "neurotic criminal." This type may break the law by compulsive crimes such as kleptomania, pyromania and pathological lying, in all of which the ego is overcome by the compulsion of unconscious tendencies; or by self-punishment, the individual wishing to punish himself for some sin he has committed and therefore committing a crime with the unconscious hope that he will be caught and punished. The neurotic criminal is therefore a sick man; to punish him is as reasonable as it was for medieval Christians to beat the insane because they had yielded to the overtures of Satan.

Dmitry Karamazov represents the neurotic criminal in fiction; Casanova, the Don Juan fleeing from love to love to find peace, is an adventurer criminal, taunting society and breaking its laws at will. Mass murders, such as those committed by Landru, the French "Bluebeard," by the Düsseldorf "Vampire," and by Powers, the American "Bluebeard," represent the acting out of criminal sadistic tendencies whose force is such as to loosen the inhibitions imposed by the ego and psychic censor. What may in one man be sublimated and lead him to become a surgeon, escapes in disguise in another and drives him to mutilate and brutally murder women and children.

The vacillation and indecision of the neurotic may take many forms, such as hysteria, hystero-epilepsy, neurasthenia, and other neuroses which are described in a later chapter.

The conflict is externalized in a personality which is ineffectual, which is constantly on the defensive before the demands of reality. He may develop all kinds of phobias, or fears, obsessions and compulsions. He cannot make up his mind whether to leave the house or to stay indoors, to marry or not to marry; he may dress and undress again and again, or take hours in deciding what kind of necktie to wear, discarding many before he makes his choice. He worries incessantly about his health, washes his hands a dozen times within the hour, flees from a coughing man as if

pursued by the devil, goes from doctor to doctor because no one can find anything physically wrong. He may develop a syphilophobia and have many blood tests taken; and despite their being negative, he refuses to accept them as final and keeps on having himself examined for a syphilis which exists only in his imagination.

"Undesirable traits" are symptoms of conflict and of repression that is faulty that have become fixed. Among the commonest of these traits that may be mentioned are:

- 1. Overaggressiveness
- 2. Impulsiveness
- 3. Loudness
- 4. Exhibitionism: the center of the stage"; 9. Temper tantrums
  - "hogging the limelight"; 10. Pouting; petulance; "showing off."
- 5. Excessive shyness
- 6. Lying
- 7. Bragging
- "taking 8. Selfishness

  - adult infantilism.

In general, any trait socially undesirable may result.

Michael Donnelly started as a ward heeler and through politics accumulated a large fortune. Late in life, he became socially ambitious and wondered why he was not taken up by the "right people." Because of his power no one dared to tell him. But the world saw him as a red-necked, loud-mouthed, bloated individual who won arguments by dint of out-shouting his opponents. He was always over-dressed and blazing with precious stones. His credo was, "If you got 'em, wear 'em."

Many who might have accepted the man for his intrinsic worth—none denied him shrewdness and a certain intelligence were repelled by his disgusting mannerisms. Yet Michael, trying his best to please, blundered on. The conflict between his undisciplined primitive desires and the demands of polite society had made him a bull in a china shop: a well-meaning bull, but none the less a bull.

Rationalization is the process of finding logical justification for desires; the reasons are looked for after the desire has made its presence felt. An example of the grossest rationalization is seen in the World War, which like all wars, was due to aggression by a strong state on a weaker one. A government that felt the need of a war of aggression to save an empire from falling to pieces, found a causus belli in the killing of a member of the royal family. This constituted—so they stated officially—the reason for the invasion of Serbia. But this was a rationalization. Actually, Austria's statesmen had long wanted an excuse for war; and the killing of the Archduke enabled them to rationalize a long-cherished desire by clothing it with seeming justification.

Donald Cook worked as a designer in a dress shop. He was fond of going to masquerades and of wearing a female costume. At parties, he would give impersonations of female stage stars. He had been the youngest of a family of seven; the others were all girls.

He insisted he had no fondness for women's dress; it was simply that he designed them and could therefore create striking costumes for himself to wear at a masked ball. Actually, this was a rationalization and an unconscious attempt upon Donald's part to cover up passive homosexual desires.

Rationalization is important in paranoia, a disease characterized by delusions of persecution coupled with remarkable lucidity—often with great intelligence. The paranoiac begins with a false belief which becomes the center of a delusional system. He imagines everyone is interested in him, that certain organizations like the Masons, the Ku Klux Klan, or the Catholic Church are persecuting him. He is suspicious of everyone; suspects that his food is poisoned, that he is being spied upon, that attempts are being made to hypnotize him or to control him by mental telepathy.

These delusions of persecution need a logical explanation; for the paranoiac is remarkably sane in all other respects.

Hence, he develops delusions of grandeur. He conceives the fantasy that he was stolen at birth from his real parents, who are wealthy or of noble—yes, even royal—rank. Or, if his disease takes a religious trend, perhaps he becomes the Messiah. He can explain logically this widespread persecution of himself only if he is an important personage and worthy to cross swords with such determined opponents; so he becomes important by rationalization. He could not be just James Smith, a nobody, for all these people would not be interested in trying to destroy him. He must be "someone," "somebody." And soon, in his deluded mind, he is.

Rationalization, however, is an everyday process with normal people, so much so, in fact, that James Harvey Robinson, the historian, wonders whether all our beliefs, our culture, even our religions, are nothing more than elaborate rationalizations of our hidden desires. It is certain that many of our prejudices are rationalizations; we find all sorts of reasons to support our dislike of certain races. Actually, our antipathy is supported merely by convenient reasons; it cloaks itself so that we may still appear intelligent in the world's and our own eyes. Voltaire's statement: "If there were no God, it would be necessary, for the nature of man, to invent one," is a classic example of this type of reasoning.

Displacement is commonly seen in everyday life. Mr. Jones leaves his suburban home in a huff after a "spat" with his wife. On the way to the station, he kicks an inoffensive dog out of his way. Arriving at the office, he takes the entire staff to task for trivial offenses which he would ordinarily overlook.

Thus innocent people and even inanimate objects may become a focus for emotions such as anger, jealousy, or hate derived from unrelated sources. These individuals become, in popular parlance, the "goats," or "fall guys," for incidents with which they have no relation. Freud sees this process as the substitution of one idea for another, just as in a dream a colorless or abstract idea may be exchanged for a vivid one.

Margaret Kenworthy was a university student. She was particularly interested in philosophy and took all the courses offered by Professor Baldwin. Night and day she talked of nothing except what philosophy meant in her life. But when Professor Baldwin left to go to another university, her interest in philosophy waned. The next term she changed her major to English literature. Margaret, it is obvious, was in love with the professor, and her interest in philosophy was a displacement of her hidden passion for the philosopher.

We forget what is unpleasant for us to remember; we forget because we must. Only we really do not forget; the incident is thrust into the unconscious. There its energy is added to that of other complexes and helps to feed the psychic unrest which so often results in a neurosis. This is one of the common processes that are listed in the psychopathology of everyday life. A few examples will show how this happens to you and me:

A man forgets to mail a letter which contains a large check in payment of an old bill—he hates to give up the sum involved. A woman mislays the address of a friend so that she will not have to write or call. A husband forgets to mail invitations to a bridge party to be given by his wife: he hates bridge and his wife's gossiping friends.

"Accidental" slips are very common. People reveal their innermost thoughts when for a moment the vigilance of the psychic censor is relaxed. Thus a friend may say: "I want to hurt—I mean I don't want to hurt your feelings but—" But the first expression indicates his real feeling. Unconscious resentment manifests itself in seeming trifles. Another man, with a deep distrust of negroes, speaks of

"erotic blacks" and hastily corrects himself, saying he means "erratic blocks." A college student writes, on his history examination paper, of the "Pope, living in a vacuum." To the professor, this is a source of amusement; but, going into the student's life history, one finds a home in which Catholicism has always been ridiculed. Thus, it is no accident that he had identified the Vatican with a vacuum, or nothing.

A great lawyer is on trial for his professional life. If found guilty, he will be disbarred. He squirms as the district attorney piles up the evidence to show his guilt of bribing a juror. When his turn comes, he says: "The public persecutor has said—" Indignation and objection from the district attorney. The lawyer apologizes. The press credits the lawyer with a shrewd thrust at the jury's sympathies. The judge and the public see his use of persecutor, when he meant prosecutor, as a slip of the tongue. But both are wrong. The accused has been worsted by the district attorney in many battles. He sees his trial and the zeal of the district attorney as a further attempt to ruin him. He himself does not know of his unconscious resentment and really believes his tongue slipped in saying "public persecutor." But his unconscious, through the laxity of the psychic censor, let the cat out of the bag.

Alcohol permits a loosening of the inhibitions, and slips of the tongue occur other than those due to disordered speech. What is buried in a sober man's heart, comes to a drunken man's lips. *In vino veritas*!

Two friends climb a mountain. One stumbles and lurches against the other, throwing him toward a precipice. The first one gasps, "My God, old man, I'm sorry. Damn near killed you." His friend, who has saved himself by falling forward and clutching at a rock, trembles and tries to smile: "God! That was a close shave!" Neither would

believe that the action was deliberate; both would swear it was an accident.

But it was not accidental. Both had loved the same girl and the first had married her. The second man still loves her and unconsciously hates his friend, who had succeeded where he had failed. All these years his censor had concealed his resentment. But when an opportunity to put his rival out of the way arose, the inhibition slackened and the compulsion to kill his friend leaped through. Some day, the first man may not be so lucky. But then it will be too late to lose faith in his friend.

A little further on we tell the story of the neurotics proper—of those unfortunates in whom conflict with reality results in flight, in retreat into a land where there is no peace for the disturbed in spirit, no comfort for the afflicted and sore of heart, no rest for the weary.

#### CHAPTER VII

# The Child In Society

# The Family and the Child

ONFLICT, as we have seen, often begins at home: family life is the earliest barrier to his wishes and strivings that the individual finds. Since the family in its various mutations is a social institution and the product of a culture, and is a unit of the social group, its ends are patterned by society and its interests are identified more with society than with its individual members. The family must keep the social contract; the individual must keep the family contract; and thus the conflict arises. Always, the family must fulfill its duty of restraint, even though in doing so it should destroy one of its own, like that Roman father who sentenced his own son to death, holding his duty to society above his love for his own flesh and blood. social taboos, the rigid divorce laws of yesterday, the ostracism of the "other woman," the religious insistence upon marriage and the family as sacraments—all spring from the fierce desire of the group to shield itself.

As the family exists because of social necessity more than for any other reason, parents rather *pretend* to be enthusiastic about begetting and rearing children; their subsequent affection for their offspring is an emotional conditioning by the life situation—it is not initial and natural. That it is natural is merely another of the fictions that the group foists upon the individual to guide him to its ends. Parent-

child love is not stamped upon the personality transcendentally. The young *learn* to love their parents because the parents are always the first source of pleasure and of protection against harm. Are we not familiar with the child, adopted in infancy, who manifests as much affection toward his foster parents as toward his natural parents?

Fundamentally, the real emotional tie between parent and child is a chain whose links are the distortions of the unconscious cravings that we see in the neuroses. The neurotic chain is forged chiefly by the mother. It is she rather than the father who dominates the child; it is she who ministers to his hunger and thirst and ego in the period of infancy and helplessness. The child depends for its growth and security upon the parent; the parent often exacts in return the vicarious fulfillment of broken hopes and dreams through a parasitic exploitation of the child. With such a selfish relation, rewards and inducements of all sorts are necessary to keep the parent-child union in the state of seeming happiness demanded by the group as evidence of its own wisdom.

In this neurotic tie, and in the exploitation of the child by the parent, lies much of the conflict of childhood. For the tradition of ancestor worship is not limited to the Chinese, but exists thinly disguised among us. We found family dynasties and try to form our children by the ancestral pattern. Thus, there are banking families like the Morgans, political families like the Roosevelts—professional families in which father and son have been in law, or in medicine, or in the ministry for generations. The family determines that John shall study medicine; and so he does, against his will, and a good carpenter is spoiled in the making of a poor doctor. John's father does not ask whether he is capable of being interested in science: he wants his name carried on in the field to which he himself added distinction.

John's "not to reason why"; his "but to do and die"—emotionally. On the other hand, perhaps a certain William wants to study art, but his parents insist upon his going into his father's bank. "Why should he dawdle away his time upon something trivial like art when he can become a great banker and help to increase the family fortune? artist fellows are not even respectable; everyone knows they live in dirty garrets and associate with all kinds of women. Why, most of them don't go to church, and some of them don't even believe in God!" So William usually becomes a banker and lives unhappily ever after.

A famous football star brings up his sons in his own image; through them he will live again in deeds of glory upon the gridiron. The son becomes a fair player and gains a place on the varsity, which his father helped to make famous. And, for two years, he endures the covert disappointment of students and coaches who whisper that he is not "his father's son." This, despite the fact that he is a good player. At last, in his senior year, he quits college, on the eve of the big game. He writes his father that he can't go on; he has always hated football, and college too, because everyone was always expecting him to do the things his dad had done. So the victim of parental selfishness becomes a wanderer rather than go on and live his life as a shadow of his illustrious father. This is often the price parents pay for making living headstones to their past glories.

Heinrich Heine's parents attempted to make a banker of him. Nor did they desist even when he became famous as To the end, his banker uncle looked upon him with contempt as a "scribbler" and a poor relation. But Heine, dwelling in conflict, lived to achieve a poetry and a prose in which "the lambent flame of his inescapable humor was like the smile of Mephistopheles crossing the face of

Christ."

O, wise the Talmud that says: "Limit not thy children to thine own idea. They were born in a different time"!

However, the vicarious life of the parent in the child is by no means the only evil that we must combat. Parents also press down upon the shoulders of their young their burdens, social, economic, and moral; and often they seek the sympathy of their children in their private squabbles. Is it a wonder, then, that neurotics in the family are often the consequence?

We speak of "problem children," but we should really say problem parents. The dynamic psychologists, such as the psychoanalysts and the behaviorists, can not but preach the liberation of the child from the yoke of the family. Some day we will write a "bill of psychological rights" for the child. For to save society from becoming a sanatorium, we must reëducate the parent psychologically and make him aware of the dynamic nature of the developing personality. We must educate children with the principles of mental hygiene uppermost in our minds. We must discard shabby shibboleths of conventional attitudes towards the family; we must purge the group of unhealthy taboos on love; and then children may really love their parents in their heart of hearts—not in filial duty. At present, most elders' love for their children is the ultimate in narcissistic worship.

Most of all, we must change the family attitude towards sex behavior in children. Here the stupidity of parents becomes gross and most destructive to the personality. Children have a natural and innocent and healthy curiosity about the ultimate mystery of creation; and all of the "evil" in sex is caused by the coloration of this motif by adolescent adults. Sex must be brought to the child as something divine, invested with the ecstasy which is its very core. The attitude toward it of sin and ugliness—which attitude is a legacy of our monastic traditions—

must be scrapped if men and women ever are to know the real exquisiteness of love. Indeed, marriages often founder because men and women have been educated against sex or have been taught to look upon it as a "necessary evil." The neurotics too often are love-hungry men and women who have been strangled by stupid taboos into denying that which is the right of every human being to affirm.

Parents must learn not to impose upon their children false sets of values and ambitions, but rather ones in harmony with their personality type. Consider the introvert, the so-called "shut-in" personality. Here is a sensitive plant, one by nature shy, modest, and unaggressive; and often he is hounded by the necessity of becoming a gogetter and by the success-at-any-price philosophy. He is made to feel inadequate, eccentric, and wanting in the things that go to make up the ideal of the American scene the one-hundred-per-center who attains money, power, and prestige. Now why should he be coerced into pursuing a success he does not desire? Encouraged otherwise, he may go on to achieve a destiny in the arts and sciences, and humanity will be the better for his having lived. as much can be said for the money kings, who often need advice of counsel on how to give away the gold they pursued to the neglect of the good things of life!

Pressure exerted by parents on these sensitive personalities is among the prime causes for the wrecks of people we call neurotics and psychotics. The group and the family must reshape its ends and remould its values, if many of the better personalities are to be saved from emotional frustration. We are in a time when the emphasis still lies on the competitive drive for power and when culture is still regarded as the resort of the weak and the "queer."

#### The Child and the Family Romance

Neurotic behavior is not limited to any age; sometimes it may occur in early childhood. The young are direct in their desires and learn quickly how to control the social situation. The following case is a striking example of such behavior:

Myra and William Jones were biologists, and, as such, they thought it necessary to fulfill their obligation to society by producing a child. All their hopes were bound up in Junior. He was to be the perfect product and to carry on the illustrious, though common, name of Jones. To the dazzled parents, the infant seemed the realization of all their dreams; in him, they would realize their frustrated destiny. They dedicated themselves to parenthood; biologically minded, they determined to guide the child's development along scientific lines. Their baby should not grow up haphazardly; he should be everything that intelligent upbringing could yield. So these parents took "courses" and read many tomes on child rearing.

At two years of age, Junior developed whooping cough, and the parents were panicky until assured by the family doctor that all would be well in a few weeks. But months passed, and still Junior had attacks of coughing that would make him black in the face. The parents consulted many physicians, who spoke vaguely of bronchitis and bronchial spasms. Fearful that an attack might prove fatal, the Joneses sought further medical advice (the public generally acts upon the supposition that if one doctor is good, two should be able to do twice as much!). But despite all their efforts, Junior continued to have attacks of choking. Finally, they told the story to a friend of theirs, a psychiatrist. He questioned them and found out that the attacks came only when Junior's demand for something was denied. So he advised the parents not to yield to Junior's desires.

Now the parents feared to follow this advice because they were afraid Junior would choke to death; but being desperate, they consented to the expedient. So the next time Junior made an unreasonable demand, they refused to grant it. As usual, he

coughed until he became black in the face; but they were firm. After several similar episodes, in which the parents stood their ground, the so-called whooping-cough attacks which had lasted one and one-half years suddenly ceased, and Junior became normal in his behavior.

The child had learned how to control the social situation by feigning a disease. He had noted that during his actual illness all his desires had been granted. And so he began to use illness as a lever to pry the things he wanted from his parents.

This parallels the neurotic behavior of adults. A wife often finds refuge in "sick headaches," nervous indigestion, backache, and other neurotic symptoms, all of which are used as a crutch to lean upon—to shirk the demands of life as well as to elicit from her husband the tenderness, sympathy, and love necessary to gratify the desires of her ego.

Jane had been a "problem child" since she was five. At twelve, she was unmanageable, was given to temper tantrums, quarreled with other children, and had no friends. Although she was above the average in intelligence, she had been expelled from several schools because of her conduct.

Jane's parents were separated. Her father came to see her only on certain holidays; her mother, who saw her more often, used her as a source of sympathy for fancied wrongs and poisoned her mind against the father with stories of his "cruelty." The child had not known affection in her life.

Jane was sent to her aunt's home, where under intelligent guidance she became a normal girl within six months.

Jane's behavior was but a result of a struggle to win her mother's interest and affection. Her mother was too shallow and too selfish to give her the love she hungered for. So Jane, prodded by her unconscious desires, thought to gain it by the abnormal conduct which labeled her at "problem child." This is an interesting example of what frequently happens to parents who use their children as a source of gratification of their egos. Often they create abnormal boys and girls who fatally wound them by bringing upon them social disgrace through neurotic conduct or criminal behavior.

In addition to the attention-gaining mechanisms cited, there are a host of symptoms that indicate fundamental conflict between the child and his environment. Among the most common of these are: lying, bed-wetting, temper tantrums, "night terrors," stuttering, masturbation, the refusal of food, and general juvenile delinquency.

Enuresis, or bed-wetting, deserves special mention because of its frequency and its resistance to ordinary treatment. I have seen this habit persist even in young These individuals are often unaware of its psychic origin, and they go from doctor to doctor, seeking relief from what they and the unwary physician believe to be a bladder weakness. One such girl of twenty-two had gone the rounds without relief, and since she was engaged to be married, her anxiety was considerable. From her history it was found that no medication would be of any use to her: close questioning revealed that the habit made its appearance only when she was away from home, or when the mother was sick, and she had to sleep alone in her bed. As a child, she had been nervous and subject to "night terrors," which disappeared only when the mother took her into her own bed. Hence, a reëducation of both mother and daughter was necessary before the troublesome habit could be broken.

The feeling of inferiority in a child is a not-infrequent result of an unhealthy attitude in parents. Consider the position of the youngest in a family in which the children have ceased to be a novelty to the parents. To the father, this youngest child may be merely a cause of disturbance in the night, and another mouth to feed; to his mother, he may come as an unwelcome, although unavoidable, burden; to his brothers and sisters, he may be but another subject for oppression under the time-honored custom of youthful tyranny. In such an environment, the child feels insecure, and lacks the love and warmth and encouragement that is indispensable for normal development. He sees himself as helplessly small, and unable to secure from the world the recognition and response he craves.

Overstrictness, particularly in the father, also often results in the infusion of an inferiority feeling in the young. A domineering man leaves his mark on his children. They are apt to be timid, sensitive, self-conscious, and self-critical. And they are often failures; not through lack of ability, but through the want of confidence that is the direct outgrowth of the parental oppression.

Nor can unsettled homes but contribute to the feeling of insecurity in the child. The child compares himself, with unpleasant conclusions, with his more fortunate fellows. Separation, poverty, family dissension, antisocial behavior (crime), and divorce often express themselves ultimately in juvenile conduct disorders. These may be based upon the child's consciousness of the social disapproval attached to a divergence from usual family life.

If a child has parents who coddle and overprotect him, he may suffer an equal misfortune. When he is well, he is constantly cautioned against doing this or that, because he is "not like the other boys"; and when he is sick, he is permitted to upset the family routine completely. The idea that he is "different" grows easily in him and is quickly accepted. And the consequence is often that, being ever mindful of his fragility, he is unable to make his way in a world unsympathetic to claims of special privilege based on real or fancied handicaps.

Again, we may see conflict between environments. Many

a child, such as those common among second-generation immigrant stock, tries to live in two worlds at once. Two sets of customs, ideals, and goals demand his fealty. Usually the pull is stronger in the direction of the American scene; sometimes the other prevails, because the pleasure principle is best gratified there. But whether the pendulum swings one way or the other, *conflict* always follows, and abnormal behavior of the type called neurotic in adult life, may result.

#### The Family—Its Past and Future

If the family is to function with efficiency, it must be dynamic and must vary its standards constantly to meet the requirements of a changing ethic and to help its youth to become adjusted to a new world. Such was the demand upon family life in post-war America. A note of internationalism crept into our thinking; a change in our industrial philosophy became manifest; new attitudes towards crime and punishment began to bud and to show their heads above the soil of American thought; and, above all, our religious ideas were subjected to a discussion never attempted before. Intelligent parents helped their children out of the mental and emotional morass which was our sole legacy from the struggle to make the world safe for democracy. But the other ninety-nine per cent of the parents left their children to flounder and find their own path. And the fruits of this neglect were reaped in the revolt of the flapper and the era of the "collegiate," the youth who was long on trousers and short on sense. this we owe the drinking and licentious conduct in our colleges. And as a final result, we are now witnessing the breakdown of the family as the cornerstone of our culture.

All of this misfortune is the result of a bewildered youth in conflict, of a generation thrust into an unfriendly reality and beset by many choices, and of heads set whirling by the

kaleidoscope of a civilization drunk with power. The family, never having lost the impress of the patriarchal period when the family was the group, attempted to hand down a tradition and to mold the young in its own pattern so that the environment should mirror its aims and give sympathy to its task. But a world boiling with a new industrialism, impregnated with revolutionary political ideas, and excited by visions of a new sexual freedom, did not endorse or harmonize with the conservatism of the elders of the fat forties and the futile fifties. And so the family, the fountainhead of social stability, has become the butt of youth's witticisms. Easy divorce, the tacit assent of society to free love within discretion and to the freeing of children from the voke of parents, have gone to the head of modern youth. Marriage has become a joke; and the problem has become: After marriage—what?

Margaret Mead points out that conflict and maladjustment are less frequent in primitive society. This, she believes, is due to the fact that primitive adolescents do not have the problems of our civilization. Their youth face no crossroads where alternatives of careers are presented to them. There is a dominance of the culture over family life; no savage lives in a limbo between two worlds, as do many individuals of immigrant stock in America. The Samoan can be only a Samoan; in New York, an Italian boy must often be a Sicilian and an American; or a German, a "Dutchman" and an American; and a Jew may live in the Ghetto and love the traditions of his race, but he is expected to mourn if his college loses the big football game.

Adolescence is of course the period of the greatest personality crisis. At this point, biological inadequacy, environmental defects, and poor psychosexual development make themselves felt. It is then that personality-destroying weaknesses rear their ugly heads. Some thirty-seven

per cent of habitual offenders begin their lives of crime between fifteen and eighteen years of age. Obviously, the particular folly of our social system, which is abetted by the family, is that we push our youth into conflicts by asking them to choose a career, by forcing them into some sort of economic independence, and especially by subjecting them to the social mill at a time when the mystery of their awakening sex life calls for their careful guidance.

However, there are signs that intelligent parents are waking to the peril that threatens. We see these signs in the various experimental schools, in the behavior clinics, in the Adlerian kindergartens, in the child study movement, and in child guidance institutes. Yet, in making these desirable experiments we need only remember that there is no need to substitute the state for the family, as in Russia; for that is often as bad as the distorted thing we now call family life. Children in an orphan asylum do not thrive as well as the young cared for in a home, even by foster parents. Children need love and affection, as plants need rich soil and the kiss of wind and rain.

Our homes must become homes in which husband and wife meet in common interest, and yet have other tasks outside to fulfill themselves. And parents must learn that it is better to separate rather than to chain each other and continue in a slavery for "the sake of the children"—that it is better to separate than to fear the gossip, the scandal, and the loss of social prestige that divorce often brings. Indeed the time is not far off when parents will be required to show that they are capable of overseeing the development of their children. Many states already require evidence that men and women are free from disease before they are permitted to marry.

If the family can learn to limit the war between parent and child; if it can provide a background of harmony for the young; if it can view with understanding and sympathy and give direction to the curiosity about sex in the maturing child; if it can assimilate the principles of dynamic psychology and help to steer the growing youngster away from the rocks of conflict and from the neurotic bondage it has imposed in the past—then it will survive as a social institution.

The X-Ray eyes of dynamic psychology see through the shams, pretenses, and false glamor attached to the family romance. It looks at the surface happiness of a family reunion with its logs crackling cheerily upon the hearth, the laughter and quips of the adults, the pranks of children, the window-panes silvered by frost. It sees all that, and more. It peers down into the unconscious minds of all present and discovers the disquiet, the turmoil, and the ferment that is hidden by the conventional gestures; it sees such minds as prisoners in a bondage stronger than any chains the *real* world knows. Too often, the lilt of Christmas carols is as one of terror, of whistling in the dark.

May this author be preserved from the doting, distressed mothers who wring their fingers and moan: "I don't understand my David. I have done everything for him, suffered and sacrificed to see that he got an education, worried myself sick if he so much as coughed once. Nothing was too good for him. And now he thrusts a knife into my heart by eloping with a strange girl. It does not pay to bring children into this world and to suffer for them." One can answer her only with: "No, my dear lady, you have done too much for your son. You have overprotected him, been too good to him, suffered too much for him. It would have been better had you let him help himself. But you would not. You did all these things not for him but for yourself! The more you did, the more your friends praised your devotion; and that was wine that went to your head.

So you did more and more. Your boy never had a chance to live his own life. He was only a means for you to achieve great ego-satisfaction. Of course, he ran away. I'm surprised that he did not do so sooner." Zufiel ist ungesund!

This indictment of family life is not too harsh. Witness the mounting rate of divorce and separation. Listen to the vast army of jokes about marriage and the family. Listen to young people's cynical comments upon the noble institution. Remember that extra-conjugal sex relations are deemed almost respectable if mere discretion is practiced. And estimate the effect of the new economic order upon the family—thousands of women have become but part-time wives and mothers. Above all, ask any psychologist or psychiatrist about the future of the family. He will affirm that natural evolution—in the case of the family—and the new education are running a race; and that at the finish line, evolution as it is at present directed will meet catastrophe, and there will be the shattering of a longcherished and happy illusion—the family as the incarnation of the order of things as they should be.

Evolution or education: Which will win?

#### CHAPTER VIII

# The Œdipus Complex

## Neuroses and the Œdipus Complex

IN THE Œdipus complex, Freud and his followers vision a factor which they believe to be universally operative, a necessary stage in normal sexual development but often the cause of conduct aberrations. Others also have made contributions that support the activity and importance of this mechanism which, if not universal, is frequently seen in mental disorders. For Freud and his followers, it is the nuclear complex of every neurosis.

The Œdipus complex takes its name from the Greek drama of Sophocles, "Œdipus Rex," the action of which shows the inevitability of the fate which destines that Œdipus shall slay his father, the King of Thebes, and marry his mother. The Electra complex, the converse of the Œdipus complex, alludes to the Greek tragedy, also. Electra, in love with her father Agammemnon, sees him murdered by her mother, who has been unfaithful to him. Electra saves her brother, Orestes, from intended murder at her mother's hands and then urges him on to kill Clytemestra, their mother.

Myths and folklore of all lands testify to the universality of this fly in the ointment of family romance. In the Greek myth of the gods, Uranus is overthrown by his son, Kronos, and Kronos in turn is overthrown by Zeus. Patriarchal society always feared the overthrow of the chieftain by one

of his sons because of love for one of the chief's many wives. This is probably responsible for certain taboos designed as protection against such situations.

The Œdipus situation, or the parental complex, represents an unconscious conflict between sex desire for the parent of the opposite sex and the universal taboo against incest. It is supposed to arise in the fantasy life of the child during the phallic stage of his development. Although this arises in the unconscious, it takes on, for the psychic censor and the "inner conscience," the quality of an act. produces a sense of guilt and fear, as is frequently found in dream analysis. This fear sometimes produces the castration complex; that is, the boy develops a dread that his father will remove his sex organs to punish him for coveting the common love object—the mother. Fear, however, sublimates the love for the mother into tender affection, this occurring at the end of the infancy period. The son loses his hostility to his father by intensifying his identification with him.

The Œdipus and the Electra complexes—the latter being daughter-father love—are rooted in the family romance. The parent-child relation is universal. The infant, thrust into a reality from the warmth and safety of his mother's womb, protests in weak cries against his new environment. And quickly he learns to depend upon his mother's breast for nutrition and her arms for protection against danger and unpleasantness. Infants thus come first to settle their detached libido cravings upon the mother, the source of comfort and the guard against harm. Regression of a profound sort in the insane shows the tendency of a frustrated individual to return to the infantile and even prenatal state, in which life was pleasant. In a sense, the idealization by mature people of the "good old days" represents the same mechanism. The poet said:

The crown of sorrow's sorrow, Is but the remembrance of happier days.

## The Family "Romance"

The family romance—the story of you and me—is built upon the dependence of the child and upon the preachment of the doctrine of the family's greatness. The child is already predisposed—because he identifies himself with his father—to believe that his male parent is the sum of all virtues and the possesser of all abilities. Dynastic families with their emphasis upon traditions and the attempt to mold children in an ancestral pattern, furnish examples of the viciousness inherent in the universal myth called the family romance. Children of many great families have bred in them a feeling of inadequacy or inferiority where the deeds and glories of their clan are harped upon, and when the time comes for the child to shake off his dependence, to go out into the world and distinguish himself, he hesitates. How can he ever hope to do the things his father, his uncle, his grandfather did? They are so strong, and he feels so weak; if he fails, will they not look at him with contempt? Perhaps they will ridicule him and tell him that if only he had more courage he might make good. And so insecurity and doubt grow in him, and he thinks of how pleasant life was when he was a young boy: then there were no problems to trouble him, no battles to fight, no defeats to suffer. Everything he wanted came to him from the hands of the mother he loved and the father he worshiped . . . If only he could be a child again! And in the unconscious a thought is the father of reality; and so he does become a child again. Thus, fantasy brings relief where reality and conflict brought unhappiness.

Parental attitudes such as "babying," overindulgence, and unwise demonstrations of affection, make the ultimate process of weaning the child difficult—often impossible. No one likes to leave a fire of logs crackling on the hearth to go out to shiver in the blasts of winter. So when children are forced out into the cold, they come crawling back soon, whining and complaining and seeking to warm themselves again. Children must be gradually prepared for the independence of puberty, and they must not be thrust out unprepared to cross swords with a reality that demands of youth the social response of the adult. Actually, the family romance—what optimism the name implies!—can dissolve the Œdipus situation normally at the time of puberty if its attitude takes account of the dynamic factors involved in child upbringing. The incest motif which is the nucleus of this complex is broken by the socialization of the child's sexual drive.

Incest is practically a universal taboo, in primitive as well as in civilized states, existing even among tribes where the relationship of sexual intercourse to pregnancy is not suspected. Totemism has as one of its functions the suppression of this primal force. By establishing *phratries*, or orders, primitive peoples interdict the marriage of near relations, although there are some exceptions, such as that of the Egyptian dynasties, which maintained the brother-sister marriage familiarly exemplified by Cleopatra and her brother.

However, incest has, in the unconscious of every one of us, an archaic as well as an individual meaning. We retain and recapitulate in our childhood the cravings and the experiences of our ancestors. Above all, incest has as its motif the security and comfort that attaches to the infantile state, and the biological urge later can clothe this with the sex drive. Therefore it is the duty and privilege of the family to breed in the growing child the confidence to stand upon his own feet; to engender within him the concept of

independent action as the guide to ultimate happiness, thereby leading the sexual force of the Œdipus motif into social channels, to the choosing of love and to other objects outside the family, and summarily to the sublimation into tender affection of his sexual love for his parents.

Where the complex is not shattered at puberty, as is normal, it is repressed. And then all the familiar effects of repression may become active. Regression and other mechanisms of neurotic behavior may become manifest, depending upon the relative strength of the complex and the success of its repression. Conflict begins, although it does not necessarily precipitate the neurosis that has as its nucleus the unsolved Œdipus. Sometimes the problem is solved in the marriage of a young man to an older woman or of a young girl to a much older man. People are at a loss to account for such matches, in which all of the usual social motives—love, money, or position—are missing. The explanation lies in the fact that the young man or voung woman has an unresolved Œdipus still active in the unconscious. He craves the comfort and security he had in his infancy. By chance, he meets someone with a fancied physical or other resemblance to his mother or father. Presto! The magic of identification with the parent image is accomplished, and by marriage he acquires a mother or father surrogate or substitute. The attempt to duplicate the mother or father image takes form even in the frequent marriage of near relations by neurotics. From this new relation, they seek and often find the comfort denied them by a reality which insisted upon leading them away from the pleasure and security of infantile life.

Many creative artists have married and been "comforted" by wives older than themselves. Yet, in their work they betray conflict and turmoil, stained with their

neurotic symptoms, buried in the inner layers of their unconscious. Often, the expedient does not succeed, and the artist hops from marriage to love affairs and then back to marriage, seeking relief from his psychic tension. The genius of Strindberg and Milton aches with the throb of unhappy sex lives; Shakespeare derides his Anne Hathaway in his "Taming of the Shrew." Dr. Samuel Johnson, a notorious sufferer from hypochondria, finds his plain, ignorant wife the apotheosis of all womanly virtues because she ministers to his neurosis and gives him the infantile comfort he still seeks. Even Socrates had his Xantippe!

The failure to relieve the pressure of an Œdipus fixation upon his mother is the key to the life and literary creations of D. H. Lawrence. This artist, aware of the truth of psychoanalysis, tried and failed to dissolve the complex which marred his sex and love life. His books shriek with the sex motif; all his life was dedicated to a war against the censorship of sex in literature. His personal as well as creative life was marked by a species of exhibitionism; all this represented a conscious attempt to free himself of the invisible cord that bound him to his mother. But with all his efforts, he was impotent to escape from his prison: all his protests, his invectives hurled against a "sex-as-sinconscious" society, his attempts to find sex happiness with many women, represent a whistling in the dark. He remained unhappy and unfulfilled because of an Œdipus complex that never was solved.

Another factor that makes the Œdipus situation difficult to solve is the fact that the parents are the source of authority. Punishment and discipline intended to socialize behavior are not infrequently used in the fantasies of children to build up and to justify their unconscious hostility to a parent. Sometimes also, the brutal treatment of the mother by the father gives a boy a certain

moral justification for his incestuous longings. This is reflected in the abnormal sexual development of many of the children of unhappy, divorced, or separated couples.

Mothers have been known to foster in boys a hostility to their fathers by recounting their cruelties, picturing themselves as martyrs and in some cases actually inciting the boys to injure, or even to kill, the father. The notorious "Two-Gun Crowley" is a case in point. Told of his illegitimacy and knowing only that his father was a policeman, all the usual incestuous hostility became *identified* with policemen. That his hatred found its outlet in the murder of a "cop" and that he died uttering his detestation of them, is but an evidence of the devious channels into which the Œdipus relation may lead human beings.

Inadequate dissolution of this complex often has the effect of investing all other love relations with the original incestuous taint. This is seen sometimes in the Messalinas, Don Juans, and Casanovas of this life whose flitting from affair to affair is but the vain searching after an affection that does not leave guilt in its wake. They try to atone for this unconscious feeling of guilt, but without success, for one cannot requite with penance that which is the unpardonable sin to the inner conscience. This sense of guilt plays an important rôle in the growth of morality and religion, upon which social orders are based.

## The "Frigid" Mothers

Frigidity in mothers, whether due to a secret love for a man other than the husband, to a difficult childbirth and the fear of another pregnancy, or to repressed homosexual trends, is a frequent source of incestuous fixation. The elements of an unhappy marriage—frigidity in a woman can lead to no other kind—the tears, quarrels and scenes between the parents, form an unhealthy background in

which it is almost impossible for a child to grow up balanced and happy. Such children develop a fear of marriage—much the temper of our times and the general result of unhappy family life—and thus the way to a normal solution of the Œdipus is blocked. Without the desire for marriage, the sex impulse can find its satisfaction only in asocial outlets, and conflict ensues.

Even more important is the sex attitude of the frigid mother. She distorts sex and pictures it to the growing child as a sin, a weakness, and as evidence of depravity; at best, it is visualized as a necessary evil, as the price a woman pays the man for the creature comforts and social pleasures of marriage. This attitude is particularly true of one of the most flourishing of religious cults, which seems to recruit the bulk of frigid women, perhaps because its doctrines enable them to rationalize the selfish and twisted sex drives that so often disguise abnormal cravings.

Frigid women, repressed and struggling against their own conflicts, war against the normal expression of sex in the lives of their children. They punish the infant by binding him when he manifests the autoeroticism that is the natural avenue of the infantile sex drive. Such children wet themselves and show defects of behavior, such as stammering, later on; these are the signs of rebellion against the damming up of the sex impulse. But frigid mothers cannot be discouraged by reason; they continue the war, invoking religion and ethics as weapons to destroy the "Satan" of sex.

At puberty, the child feels his body throb with the ache of desire; but in his brain is dinned the fate which awaits him who yields. He discovers masturbation and is conscience-striken by his transgression. He is told that such activities lead to lack of growth and to insanity (so strong is this latter fallacy that many physicians still believe it

itself to be the cause of certain types of insanity!). The child feels himself defiled and filthy; he reforms—then weakens. Now he is sure everyone knows of his secret sin. He develops the pimples of an ordinary acne, and is horrified because he thinks it blazons to the world his moral guilt. He becomes shy, avoids even his own family, blushes and stammers when forced to speak. He may begin to lie or steal, or to play truant. Sometimes, believing that he has ruined himself by self-abuse, he may even commit suicide.

Frigid mothers bind their children to them with the "silver cord"; they are jealous of any affection demonstrated by their children for anyone else. With all the selfishness that is the core of their being, they fight to keep their children from normal sex expression even as adults. They now preach the dangers of venereal disease. They discourage friends of the opposite sex; they try to prevent marriage by disapproving of the choice, no matter how suitable it is; or they invoke the sympathy of their sons by tears and depression at the first hint of matrimony. They may hide their design by suggesting girls to their sons who they know in advance have no attraction for them; sometimes they even arrange loveless marriages for material reasons, knowing then that the union will be matter-of-fact and that they will continue to possess individually the love of their children. An example of such an attitude follows:

Kathryn Allen was a rather pretty girl of twenty, rather nervous and high-strung. Her mother had brought her up to fear seduction: all men were hypocrites and liars, and their intentions were strictly dishonorable—they sought only one thing from women. So Kathryn was convinced that she must be immoral, because she had sex desires despite the things her mother had told her. She prayed to be purged so that she might become clean again. And for a time she knew peace.

But soon she fell in love with an eligible young man. All her desires returned, and somehow she felt that love was something good and beautiful, and she wondered why. They decided to marry, and told the mother, who became furious and forbade the young man the house. And, by dint of lying about his character, the mother finally broke up the affair.

Other suitors came, and each time the same trick was used to prevent marriage. After the last one, Kathryn became very depressed, then dull; and she began to act peculiarly, talking to herself, smiling without cause. Finally, she lost interest in everything. At present, she is confined to a hospital for the insane, a hopeless case of dementia praecox. Kathryn found a release in insanity which her frigid and selfish mother denied her in reality.

Frigid mothers sometimes determine the Œdipus relation of their sons in a homosexual outlet.

Arthur Stewart was a rather shy, red-cheeked boy of eighteen, rather feminine in his manners. As a child, he had been called a "sissy," and "Mama's boy." When he had sought sympathy from his mother, she had scolded him for playing with such rough boys, and she admonished him to stay away from them. She encouraged his playing with girls—that "they are so much more refined" was the *reason* she gave to his father. He disapproved, but was afraid to argue, since Mrs. Stewart was a cold and self-willed woman who dominated him completely.

As Arthur reached puberty, his mother suddenly changed. She refused to let him see girls his own age but began to encourage his associating with "nice" boys. And Arthur was sent to a boys' school, where he was initiated into homosexual practices. Later in life he made numerous attempts to marry and live normally, but in each case the mother intervened. She knew of Arthur's abnormal sex interests, but she *preferred* his homosexuality to his yielding his love to another woman.

Homosexuality is, when not organically determined, the frequent result of failure to dissolve the Œdipus complex, and it is most often caused by unwise parental attitudes.

James London was a drug addict who had begun the use of heroin shortly after his marriage to a nurse. Although he had

been a successful business man until a few years before, at forty-two he was down and out.

His history showed that he had lived and slept in the same bed with his mother until he was thirty-seven years of age. He had been intensely devoted to her and had supported her since the death of his father, some twenty years back. Despite her urging, he had refused to marry during her lifetime. On her death bed, she had made him promise to marry, and he had. But there could be no sex relations, since he had developed impotence. This had become a source of friction, and so he had taken to drugs to find a way out. He had begun to lose interest in his business, and soon his affairs were in a bad way. At length, his wife had left him, saying that he had no need of her—that she was sick of substituting for his mother.

In this instance, there is another not uncommon or abnormal solution of the Œdipus complex. James had formed a complete *identification* with his mother—indeed, she had once said that James was "like a daughter" to her—so that he might gratify his homosexual fixation upon his father. His impotence was, of course, psychic—a defense against a relation he did not desire—heterosexuality.

Cornelius Long had been a "mama's boy." A school teacher, he had been arrested at thirty years of age for making advances to two of the boys in his class. The unmasking of him as a pervert had shocked the entire community in which he lived. He was known as a quiet, dignified, and cultured man who seemed to be the happy father of two children.

The story of his life showed that he had practiced homosexuality since the age of fifteen. His marriage was a cloak—as it often is with sex inverts—to hide his abnormal cravings. He was the product of a marriage of an old man and a young woman. His father had tyrannized his mother and himself. Cornelius and his mother, starved of affection, had found in each other the refuge from the bullying of the old man. But with all this, they had both loved him and plotted for hours to gain a sign of his affection.

At boarding school, Cornelius had been initiated into homosexuality by the house master. His day-dreams had now become

colored by this new manner of gratifying the cravings that he had sensed so dimly. What had happened was that he had identified himself too strongly with his father in an attempt to secure the love of his father.

After the latter's death, Cornelius had married a girl whom he had known all his life. He had confessed to her his troubles, but she had laughed at him, telling him that marriage would solve his problems. But, as with many of his kind, it had seemed only to arouse a more violent conflict and to make more intense the fear of discovery and of social ostracism. Discretion had covered his peccadillos until, in a fit of "I-don't-care," he had indulged in the action that had proved his undoing.

His wife had had several nervous breakdowns, due undoubtedly to the strain of living an unnatural life. She had endeavored, without success, to sublimate her sex desires by assuming a mothering attitude towards him. She is now in a sanatorium recuperating while her husband is serving a prison sentence.

Marie Lamotte is a divorcee of twenty-five. A graduate of a Southern university, of good family, and very attractive, she seems the happiest of women. Men were "simply mad" about her, and she had many women friends despite it. But her divorce came because she could not face the facts of sex life.

"I simply couldn't bear to have him touch me. Sure, I'm crazy about Jim—love to have him around, and all that. But I hate to have him paw me. Why are all men sex-crazy, doctor?"

She is sure she still loves her former husband and that no other man will ever mean anything to her. If only he didn't have to have those "horrible sex feelings" all the time! Why couldn't he be satisfied with quiet affection? Have a baby? Why, she wouldn't think of it!

Here we see a regression from an Œdipus to the infantile state of narcissism. This young lady spends her time getting all she can from life and giving as little as possible. She was brought up in self-worship, and, almost like the infant, she has no awareness of the outside world except as a means of gratifying her desires.

There are many Marie Lamottes in this world: spoiled daughters of the rich or of other overindulgent parents.

The attitude of oversolicitude, the gratification of all desires no matter what their nature, and the overprotection by fond but foolish parents, produce men and women who flee their Œdipus problem to find refuge in infantile fantasies. We see them as the vain and selfish wives who flit like moths before the social candle. They gossip afternoons and complain bitterly of the necessity of preparing delicatessen dinners for their husbands. If they yield to social pressure and have a child, by their selfishness they stifle its craving for attention and throttle its personality fulfillment, because they must always have the spotlight. They see the life of others not as a complement, but rather as a source of compliment, to themselves. All existence becomes a mirror in which they may worship their own likeness, their own gifts, their own beauty; and in the end, they seek in neurosis the satisfaction lacking in the superfluities they find in reality. They are restive without purpose, impatient without cause, and unhappy without reason.

The Œdipus complex illustrates again the element of conflict whose solution makes for good or evil in human conduct. Upon the total personality there is constantly imposed the necessity of a choice: instinct or culture? The Œdipus situation helps in the erection of the super-ego, or inner conscience, and the race and the battle between the demands of instinctive cravings and the mandates of society are neither to the swift nor to the strong, but to the personality wisely piloted past the reefs and shoals of adolescence into the harbor of manhood. Wise the parent who recognizes storm signals and guides his child past the angry seas of puberty!

#### CHAPTER IX

## Sex and Character

#### Sex in Civilization

SEX is life. Those three words tell the story of thousands upon millions of years; of the thoughts of all the multitudes called Man. All living things partake of that which is many things to men but one thing to Nature. One feels a sense of awe, reverence, and inadequacy when he attempts to trap this spirit which animates all living, gives direction and purpose to life, and brings richness of color and undertones of exquisite music into the lines of the most humble, making king and peasant kin. Sex preceded civilization, and all culture owes its existence to the sublimation of the sex instinct; all the arts that enrich life are the products of its primitive energy, diverted as the power of a cosmic Niagara to work for the destiny desired by the group.

Primitive and savage societies have yielded sex its rightful place; they have seen it as the core of creation, as the solution to the mystery of life. The savage sees his sex functions as kin to the generative process of all nature. He invokes sex in orgies of sympathetic magic ritual to make the corn grow and to bring children to sterile wives; he uses it in primitive religious ceremonies as an act of obeisance to the gods of his universe in the hope of securing their favor and averting their anger. He tries to please his god in sexual union, offering the gift that makes man the

equal of the gods by enabling him to create life. This is the ultimate in a votary's sacrifice. No one, indeed, has ever offered a better answer to the riddle of existence than the one word "Procreation!"

It is, then, ironical that the society which owes its very being to sex has done its best to drive its benefactor deeper and deeper underground; it has stifled and denied sex: it has condemned it by law and tried to outlaw it by religion, some cultists even denying that it exists! Stupidity and sham morality mark our attitudes towards sex in this year of grace, and therefore ours is a world sick with conflict. Nowhere is struggle more marked than in the straining of the sex instinct for expression rather than repression; for exhibition rather than inhibition; for satisfaction rather than frustration. The spirit of revolt in which the "flapper" and the "collegiate" and the "new woman" are leading the parade, has swung to an extreme against a stupid society. The group and its institutions the church notably—which failed to invest sex with the simplicity and sweetness and naturalness that is the essence of this impulse that rules mankind, are now reaping the whirlwind. A younger generation gone berserk has converted freedom into license, dignity into vulgarity, repression into overexpression. A neurotic age is drunk and reeling in a new-found freedom. Whether sobriety will come later depends upon the development in place of false morality of attitudes more in consonance with truth; upon the ability of the group to reconstruct its social ideals so that they may in reality minister to the need for happiness of the individual rather than pay homage to eclipsed ethics and misbegotten gods.

Man is at the crossroads. Whether he goes on to sanity and happiness or to the destruction of the group, depends upon whether he alleviates the age-old conflict, which has put his mind in torment and torn the roots of society, with a new attitude towards sex. Too long has prudery poisoned this river of life at its source. It would in many respects be far better to go back to the sex attitude of the primitive man. Sex built civilization and its arts. And sex can also destroy it.

Man is a house divided against itself, and the rock upon which he divides is the force that is the breath of life and the eternal unfolding process of nature. We must realize that sex precedes society; that it precedes the sense of right and wrong. Sex is anterior to morals, which are society's pensée d'escalier. Sex is neither right nor wrong, normal nor perverse, social nor antisocial. It is of the earth earthy; it is a primordial rhythm, and is as fixed as the stars in their courses; it is the core and the only answer to the mystery of creation; and from it well the ecstasy of religious fervor, the madness of the dance, the soaring imagination of the poet, the grandeur of the philosopher, the transcendent vision of the painter—procreation.

Rousseau was right in idealizing the noble savage in respect to his attitude towards sex and its relation to life. The noble savage is largely a myth, but the social order of the primitive is at once a rebuke and a challenge to a society built by the sublimated energy of the mating instinct. The studies of Roth, Brykk, and in particular, Malinowski, in New Guinea, and of Margaret Mead in Samoa, shame us with the discovery that in the matter of sex the primitive is "civilized" and we are barbarian. Our society, preening itself for its moral values, is but a prude; our culture, vaunting its social and æsthetic superiority, makes bunglers, while the savage is made an artist playing the sex theme and ringing all the changes, through his otherwise inferior social order! The savage's taboo against sex can be excused, since he does not know the laws of cause and effect and thus

fears the wrath of the gods; our social restrictions cannot be so excused.

The savage parallels our artistic use of the sex drive by embodying it in his ritual, in his myth, and in the dance, by all of which he worships the mysteries of Nature. Where we repress and deny sex, he gives it full and natural play. It means more to the savage than civilized man; indeed it has been said that "the only savages in Africa are those who come from Europe." For us, the art of love is not one lost but rather one never learned. Perhaps the Western world would do even better to gain the Oriental point of view where sex is concerned: the Orientals have learned much from the savage, and with them love is still an art. The civilized Westerner boasts about how much pleasure he has obtained from a woman; the Oriental and the primitive, about how much they have given.

Margaret Mead's study of the Samoans crystallizes for us a point of view that our so-called civilization would do well to heed. She has shown us a social order, lying between the primitive and the civilized, in which from birth sex, like life and death, is seen nakedly, simply as the order of things as they are, divorced from savage cruelty or culture conflicts. Samoans accept sex in its variations, before and after marriage, but do not *judge* it; and their life is freed from the conflicts that injure civilized adolescence and the adult personality. In particular, the emotional crises and storms that characterize the budding of what we call puberty are missing among Samoans.

There are no "problem" children among the Samoans, for the children are not asked to deal with problems of careers or to make other choices which conflict with a sudden awakening to the existence of an impulse which transforms all life. Conflict, thus avoided, makes for happiness. Among us, the struggle between sex and

social motives, engrafted at the adolescent stage, drives our young into truancy, vagabondage, juvenile delinquency, neuroses, and often, insanity.

Where we would outlaw an unwedded mother and child—indeed, bastardy is still a crime in Massachusetts and Pennsylvania!—the primitive gives them more protection, reasoning that they need it more than a married mother and her legitimate child! And even the sex invert is accepted: he assumes the dress of the other sex, and is taken for granted, although we, the civilized, would ostracize him socially, imprison him by law, and make him "a creature of darkness," huddling with fellow outcasts for comfort; this, even though these "lost ones" have often added to the glories of what we are pleased to call our culture. Who contributed more to the Renaissance than Leonardo da Vinci?—than Michelangelo?

Primitive society shows us a social order built on the acceptance of sex as natural, as something to be enjoyed, as a game of love, and as the manner in which man pays Nature the supreme compliment—imitation. Taboos and fears and rigid restrictions of the impulse are accomplished with little or no conflict. Among the Trobriand Islanders procreation is not recognized as due to the sex act but rather is thought to be the result of fertilization by a benign spirit of the mother's dead relatives. In such orders, the maternal uncle is the "father," the real father having no relation with his children except in that he may love and cherish and help them. Not having any authority over them, he is loved by his children only through his good behavior towards them, not by filial duty, as among us. A Trobriand Island son does not suffer from father complexes as many of us do; he is not torn between unconscious hate and the conscious duty to love; nor does a daughter torture herself with a jealousy of her mother who possesses her love object—the father.

What price civilization? How different is the picture we see among ourselves! Two thousand years of dominance by a theology based upon an immaculate conception of its major prophet has made sex a sin and continence the summation of all virtue. Thomas Aquinas attempted to prove that sex was in itself sinful. And indeed the church has never more than condoned sex; marriage became in its eyes a necessary evil, an outlet for that passion which man seemed bound to express despite interdiction. It was thought necessary to apologize for the suggestion of sex in life by saying that man should not be ashamed to mention what God has not been ashamed to create! Even science for centuries neglected the relation of the sex organs and their function to the body. To this day, in some American medical schools, women students are not required to attend courses in which diseases of male genital organs are studied! Sex as a subject of conversation is still socially taboo in many circles; its mention, except in salacious wit, causes the raising of moronic eyebrows and the mental cataloguing of the daring one as a "Red." (In our time, a color has come to symbolize everyone socially undesirable.)

Monogamy was the direct offspring of this attitude; yet the defenders of the official theology have always argued as if it were a biologic mandate. Where man is permitted "to marry rather than to burn"; where denial of the physical heightens the psychical equivalent of sex—love; and where the romatically deluded vow an eternal constancy, biologically impossible, these conditions are made the conclusion of a syllogism to rationalize a social order. But the truth is that polygamy and even polyandry is compatible with a culture equivalent to our own. Oriental religions, countenancing harems and official wives and legal

concubines, refute the argument that monogamy is the basis of civilization. We ourselves, by the fragility of our marriage laws and the facility of divorce are, in sooth, practising a system of polygamy in a certain sense.

Let us contrast, now, our social order with its turmoil, ferment, upheaval and competitive clatter, with a society like that of the Samoans, founded on a natural and comparatively unimpeded play of the sex impulse. We find that their simplicity matches our complexity, their "goal ideas" our confused and blurred ends, their serenity and happiness, our conflict and misery. Adolescence, a fancied period of emotional and intellectual crisis, the supposed beginning of *Sturm und Drang*, is absent among them. Truly, we must conclude with Margaret Mead that adolescence is a symptom of the disease called civilization.

Puritanism, prudery, censorship of the press and of literature and the theatre, thunder from the pulpit against the "modern Sodom and Gomorrah"—because of this, our order must struggle with a revolt which demands the adoption of new standards, new ways of thinking, new values to guide us in the attainment of happiness, and fiction which guides us all. Is this the "divine discontent" which is the measure of our superiority over the primitive? Is conflict and unending misery the eternal portion of those who feel the moral obligation to be intelligent? Is insanity and crime the only "way out" for our neurotic age? Why the increase in divorce, in suicide, in neurotics, in criminals, in the number of the insane; why is the family breaking down? Why is orthodox religion no longer the comfort and refuge it was one hundred years ago? These are some of the questions the younger generation, the leaders of the revolt, are asking. Society must answer or go under.

The greatest single factor to be discerned in this confusion of the social order as well as in individuals, is the rôle that sex plays in civilization. This one agent is responsible for much of the unhappiness of modern youth as well as of its parents. We meet it at every turn when we investigate individual misery; we find it the mainspring of human behavior; we find it as the basic motif woven into the pattern of our crumbling culture. To deny the importance of sex is to be blind to the flowers in nature, to be deaf to the music of birds, to be anæsthetic to the pulse of all living.

### The Nature of Sex

What is sex? Everyone speaks about it, yet no two people seem to agree upon its nature. How does it operate? How can we be happy though possessed of it? When is it normal? When is it abnormal?

The answer comes to us from the many scientists who have in recent years founded the study of sexology. Our knowledge is yet limited because of an attitude which prevented the study of this most important subject until some thirty years ago. Havelock Ellis, who blazed the trail with his startling "Studies in the Psychopathology of Sex," had to eliminate his wife's name from his books because of public villification. His temerity brought upon him the full blasts of Victorian censure. His contributions, as well as those of Krafft-Ebbing, opened up the field of the perverted operation of the sex instinct.

But it was Freud who rediscovered sex. To him and to his followers the world is indebted for the first suggestion that the sexual impulse and its associated primitive energy, the libido, are the source of human behavior. Freud also saw that sex was active from infancy on, instead of beginning at puberty. This does not mean that Freud—as many who have only a hearsay acquaintance with his writings believe and print—thinks that infants have sex

desire as adults know it. It is merely that the libido, or energy, is gradually split off from the sex impulse and functions more and more to work out social ends. The sex instinct is the source of most of our activities; it is the tree upon whose branches flower the fruits of culture. It is a drive which, as Allport says in his "Social Psychology," is prepotent over the lesser drives that make for human conduct.

In the nature of things, the infant manifests this instinctive drive as a species of biological urge. Obviously, there can be no thought at this stage of procreation associated with it, since the infant is asocial and is not interested, or even conscious, of any existence but his own. As the child grows, society, through the family, begins the process of weaning him from the purely selfish exhibition of his sex impulse. Thus begins the process of preparing him for a life in a social order, and the primacy of social ends over individual desires is made constantly evident to him. And the first lesson is that race preservation is the supreme virtue; that he who martyrs himself for country, society, or religious principle, is most worthy of emulation.

In many individuals this education progresses with half-hearted success. But efficient propaganda and our subservient educational system give rise to the miracle men of our age—to honest public servants, soldiers who believe that their country fights only wars of defense to protect the principles of democracy, and men who are ready to give up their lives to religion. These characters result from a diversion of the stream of energy originating in the sex impulse.

#### Sex Discipline

Sex is the greatest single force residing in the individual that gives direction to his behavior, purpose to his conduct, and color to his acts. Even in the child it acts directly, operating on the principle of securing pleasure or avoiding pain and of relieving the psychic tension. Very quickly the child learns, as a hot stove burns his fingers, that certain desires may not be gratified wholly or in part without disapproval and perhaps punishment. However, although the child, before a certain age, certainly does not attempt to express his sex impulse as such, when disguised or converted the impulse may still desire forbidden satisfaction.

In the nature of things, the sex instinct must be satisfied or frustrated. Frustration, which must come very often—wholly, in part, or by being deferred, as when a future marriage is arranged—causes one of several processes to come into being. The first we know as *sublimation*. This, as we have already seen, is the substitution of a social end for the direct exhibition of the sex desire, the denial utilizing the libido or the motor power of the sex drive to create art, literature, music, and other things of culture. Sublimation is the compromise desired by the group; it represents the bowing of the one before the command of the many.

Another result may be retreat. This can bring on the various processes we have spoken of before: conflict, repression, fantasy formation or morbid day-dreaming, neurotic symptoms and traits, and finally, regression to a lower level of psychic activity—to a neurosis or to a form of insanity such as dementia praecox.

Instead of sublimating or retreating, however, the individual may meet his conflict by an *attack* upon a reality which attempts to thwart the all-powerful sex drive. Such individuals have a poorly developed *real* ego; so they become Casanovas and philanderers. In extreme instances, they flaunt not only the moral but the social laws, thus becoming the criminal rapists, the exhibitionists who

expose themselves upon public streets, or the *voyeurs* who haunt parks and other places in the hope of seeing couples in the sexual embrace.

Under the terms of most social orders, the sex desire may be gratified only at the expense of legal marriage. And even here, it is not seen undiluted and in all its natural simplicity. The ideals of romantic love have been foisted upon us by the sex-as-sinful concept. Thus there has been and still is in our sex attitude a feeling of shame associated with the exercise of the sex function. Courtship is one means of dissipating this distasteful reaction. The man learns to see woman not alone as the object of desire but also as the possessor of the accepted virtues—beauty, intelligence, loyalty, and so on. His sex craving thus encompasses a psychic as well as a physical ideal. He writes sonnets to his love, besieges her with attentions, grows pale if she becomes ill, sees her as the "be-all" and the "end-all" of existence. And by devious means, he tries and usually succeeds in divesting sex of the garment of sin with which our order clothes it. If he fails, he is the unhappiest of men. In fact, the behavior of the neurotic and of some types of criminals show definitely that it is this idea of guilt that precipitates their conflict.

Gratification of the sex impulse is best when not total, as Freud and others have pointed out. The familiar saying, "After coitus, all life is melancholy," illustrates its truth. Why this is, we cannot say, other than that it is probably in the nature of the function itself. Probably a certain amount of tension is necessary for the organism; too little psychic pressure may be just as bad as too much. Moderation in the satisfaction of the appetites would seem to be a fairly well established universal principle.

Dynamic psychologists concur with Freud's theory of sex and its rôle in life up to this point: that it furnishes the fuel for much of our activity and shapes many of our ideals. The theory of the libido also is admitted in general, though some of its specific applications may be denied. But it is when we come to the Freudian concept of *infantile sexuality* that most opposition arises. Yet this is exactly where Freud has done the most good: first, because he has enabled us to study and to understand the adult if we probe into his psychosexual development, and second, because he emphasizes the importance of child study and of parent and child training in avoiding the cluttering up of our society with emotional misfits.

We need not accept uncritically the Freudian tenets; but if we subscribe to a few of his well-defined principles, we may still benefit much by his teaching. What is important for us to remember is that Freud, like all of us, makes use of what Vaihinger has called "significant fictions"—of the principle that we live as if certain things were real. Law, ethics, and religion are based very often on this principle of the "as if." Kant pointed out to us that, since God and the moral law could not be proved mathematically, we had the right to live as if these were so, in order to insure human happiness. Thus Freud, like other scientists, makes use of concepts like the libido, the psychic censor, the real ego and the ego ideal, the unconscious, and other principles which probably exist but can be proved only by inference. No one has ever seen any of these things, but we act as if they were present within us. Most of them actually can be detected in the study of the neurotic and the psychoneurotic by the methods of dream analysis and free association.

#### Sex in Childhood

No study of sex and of its dominance in the conflict it often precipitates between the individual and environment,

can have meaning unless it heeds the manifestations of sex in childhood. Freud sees the libido as being split off from the sex drive in infants and children and as being capable of becoming attached to other objects, thus furnishing them with motor power for their possible fulfillment. This process proceeds through definite stages. At first, the infant is not aware and consequently is not interested in anything but his own body: this is called the narcissistic period, the entire body being invested with the libido. Next comes the oral, anal and urethral stages, during which the libido becomes attached to these regions by a process known as genitalization. The oral stage is that in which occur the nursing and thumb-sucking activities: these operations are a source of pleasure and represent gratification. The anal and the urethral stages represent the relief from tension and the gratification coming from the exercise of excretory functions: the anal phase may be manifested in a perverted form such as sadism—in erotic satisfaction derived from cruelty: the urethral, in exhibitionism—in sexual gratification gained from self-exposure.

These stages are succeeded by a *genital* phase, the final maturation into the adult type of sex behavior at puberty, in which the libido becomes attached to the organs of generation. At this time we see the attraction to other people, which is known as the *object* libido. This may, in people who are extreme introverts, become turned in upon the self and become the *narcissistic libido*. This is often the case among people suffering from the type of insanity called dementia praecox. Easy shifting from person to person of the libido is seen in hysterics and in other neurotics, this being known as transference.

Sex should progress from the narcissistic or autoerotic stage to the normal adult sex interest at puberty. Any phase in which this development ceases, we call the *point of* 

fixation. The process of regression shows us adults with an infantile type of behavior, and we may characterize the conduct of a neurotic as anal erotic. By that is meant that his behavior has returned to a point of fixation; it may also indicate an arrest of the psychosexual development. Certain traits, such as parsimony, are called anal erotic. Freud makes the analogy between the tightness of the anal sphincter and the tightness in money matters later on in life. The infancy period, as the phase of autoeroticism is called, lasts until the five-year age. It is followed by a "latency period," which extends from the five- to the twelve-year age, and during which there is an awakening of sex curiosity and the child gains some knowledge of the rôle of sex in During these years the child becomes socialized: he learns through discipline that his desires, sexual or otherwise, must be restrained, deferred or completely repressed, and he develops other interests.

Then, at twelve, he enters the adolescent, or pubertal period. At this time, there is a reawakening of the direct sex impulse; he becomes aware of new sensations within himself, new emotions stir within him, and he is enraptured by strange music from a new world. This is the beginning of the final phase of his psychosexual development. If the two previous periods have progressed normally, he turns his sex impulse towards normal love objects. But if there has been an arrest or a conflict, with fixation at any stage, mental disorders of many kinds may now make their appearance.

The first, or infancy period, is the time when much damage is done; later distortions and conduct deviations can be traced back to trauma produced at this period. These are the years in which the patterns of behavior are determined. The child is molded for good or for evil by the factors of his environment. Freud believes that at this

time the individual is polymorphous perverse, meaning that everyone has potentialities for a perverted development and functioning of the sex impulse. The condition resembles adult sex inversion. The child may be misled by physical or mental experience into sexual transgression because at this time there is as yet no feeling of shame or conventional morality to prevent unnatural expression of the sex instinct. A case of this kind came to the author's attention recently.

Antonio Bolognese was a boy of six. His school teacher consulted his parents because of Antonio's peculiar behavior. He refused to remove a tight-fitting beret which he always wore. Any attempt to snatch his hat from his head was met by a tantrum with kicking, biting, and screaming. This had been going on for several weeks.

The author found him a dark-eyed, olive-skinned youngster, shy and silent before all questions. He refused to undress and ran from the office; but, with the aid of his mother, I succeeded in undressing him. He stood screaming while I looked in astonishment at long tresses of black hair that tumbled from beneath his beret, which had been removed from his head. His manner seemed more that of a girl as he now trembled with rage.

From his mother it was learned that he had not been weaned until he was past three years of age. She believed—it is a superstition common among certain foreigners—that as long as she nursed the child, she could not become pregnant. In addition, Antonio still slept in the same bed with his parents. He was completely attached to his mother and imitated her, even to the extreme of the use of cosmetics.

In the above instance we see again how parental ignorance and selfishness may produce arrested sexual development, fixations, and sometimes—as here—the beginning of homosexual behavior.

The infancy period shows the sex impulse under the domination of the pleasure-pain principle. The infant obtains gratification and then nutrition from sucking at his mother's breast; the sensation prompts repetition. Infants

often nurse more than they need to; every mother knows that her infant will drink too much if she does not withdraw him from the breast at the end of the customary twenty minutes.

The exercise of the anal and urethral functions is also a source of pleasure, since it relieves the irritation and tension in the bladder and rectum. There is added an interest upon the part of the child, since this is the first act to complete which he needs the help of no outside agency. Thus, many children show what we call coprophilic tendencies, or a preoccupation with the function of the excretory organs. It is only socialization that produces the sense of aversion that adults know for the results of these functions.

Traces of all three periods in the sexual development may and do persist in the adult personality. Even in the normal person we may find some infantile impressions remaining in the unconscious. These are spoken of as fixations and help to explain many personality trends. If much libidinous energy is attached to these infantile wishes, a neurosis is likely to develop. This explains why some adults behave like children. They want the moon and cry because they can not get it. Indeed, a neurotic is really either an "overgrown" child or an individual of mature years showing an adult infantilism due to the process of regression.

The most frequent cause of arrested sex development is the almost universal use of shame and of fear of punishment by parents to prevent the infant or child from yielding to the biological urge. A youngster, finding a pleasurable sensation in touching his genitalia, or asking questions due to awakened curiosity, is met by a strong parental reproof. The child is expected to grasp the social point of view—that sex exists only for marriage and procreation. His attempts to obtain a gratification of an instinctive impulse are stamped as filthy, unclean, and disgusting; and older children are told that masturbation leads to insanity. The latter belief, in particular, is false, although it is true that the wounding of a delicate organism in a stage of growth is often sufficient to throw it off balance and to produce many of the distressing distortions that are society's secret sins.

In the adolescent period the normal child begins to lose unconscious incestuous longings and to find himself directed towards extra-familial love objects. There is at this period some manifestation of homosexual trends, these being known as "crushes." These tendencies may be sublimated and become the basis of friendship and of love of humanity in general. The incest motif is transmuted into tenderness and affection.

Fixation may exist even in the normal personality, and it represents a "weak spot" which the stress and strain of life may convert at some time into a neurosis. Something of the child, with his cravings and frustrations, clings to us all. But even a strong fixation or flaw in development does not make certain a later neurosis; it merely indicates a possibility and gives us a neurotic predisposition, in that it bears an important relation to regression. The stronger it is, the easier it becomes for an individual thwarted by reality to regress and return to fixated or childish behavior; at such a psychic level, he can gain a measure of happiness by fantasy formation or by other abnormal activities. The greater the fixation, the more sensitive an individual becomes to the wounds of life, to the "slings and arrows of misfortune," and the more he "digs in." This further retreat into the self is truly a vicious circle.

The following is a typical case of oral fixation.

Harry Williams had not been weaned until he was two and one-half years of age. Even at twenty he sucked in milk noisily,

with all the delight of an infant. Later on, he found that he could quiet his sex cravings by drinking milk at night. He also overate and salivated during sleep. He has never been able to fall in love and at forty is still unmarried.

We see in this individual one who has regressed to a primitive stage in his psychosexual life, the oral phase in which sucking, biting, swallowing, and chewing give satisfaction to infantile sex cravings. Thanks to poor home training, Harry still functions at an infantile emotional level.

The importance of *libido* fixation is that it is bound up with the idea of regression. This is the process in which there is a return flow of libido to the point of fixation in early development when conflict becomes severe or adjustment to reality impossible. This mechanism operates largely in neuroses and in dementia praecox and shows itself in infantile or childish behavior. It is the personality's way out from unpleasant situations; it seeks a simple and easily attained satisfaction in place of the difficult happiness proposed by society. The man returns to the parasitic position of the child, getting all from the parents and the environment.

Sam Kellner came of poor parents. He educated himself and began to teach in the city schools. At night, he studied law. At the age of thirty, he was a successful lawyer. He fought and put through the first Teachers' Pension Bill through his own efforts, and everybody predicted success for Sam. It was no secret that he was slated for the bench in the next election.

At thirty-two, Sam fell in love. The girl was of high social position and not of his own religion. Sam's mother objected to the match. For months he struggled between his love and his duty to his old mother. At length, he gave up the girl.

Within a few months, a change began in him. He avoided people and would not leave the house. When a knock came upon

the door, he started in terror and implored his mother to protect him. He began to hear voices, and he progressively lost interest in all things outside of himself. At present, he is constantly absorbed in himself and in his fantasy life, of which he talks to his mother. He answers questions readily but in the manner of a child replying to a teacher. He cries and laughs easily. As yet, there is no intellectual deterioration.

Regression is the process at work here. Sam found reality too heavy for him to bear, and so he stepped into the former existence in which his mother had done everything for him. Now there are no problems for him to solve: his fantasies give him the ego satisfaction he craves—the libido has come home.

But one looks at a man of forty-three behaving like a child of four, and one wonders why parents, like all people, kill the things they love.

Enuresis, or bed-wetting, is another type of fixation:

Gladys Cooper is a matron of twenty-seven. She is pretty but spoiled, and is given to tempers and "sulks." She came to see the author with her mother, from whom it was learned that she had been able to stop the infantile habit of bed-wetting only when she was past twenty years of age. Shortly before she married, at twenty-six, the habit had reappeared.

A few questions soon showed what had happened. Gladys had been petted and pampered by her mother and had slept in the same bed with her until she was eighteen years of age. The parents were divorced, and Mrs. Cooper had kept on warning Gladys about men. Several offers of marriage to Gladys had been refused because of the mother's refusal to give her consent. The daughter saw only women, the mother frowning upon all male companions.

The bed-wetting process became an expression of an infantile form of sex-gratification—masturbation. Gladys, finding no normal outlet for her love impulses, sought and found it at a lower level. In this return to the *urethral* stage of her psychosexual development, she was able to find a certain satisfaction. Although she had finally married—much against her mother's

wishes—she still yielded to an infantile craving that was stronger in her than normal sex expression.

By a long period of reëducation of Gladys and her mother, and by the coöperation of the husband, an adjustment was finally effected.

### CHAPTER X

# Dreams: The Language of Conflict

# Early Attitudes toward Dreams

ROM the beginning of time man has been a dreamer.

And dreaming has lived on:

The dreamer lives forever, The thinker lives but a day.

In dreams, the ancients saw omens and prophecies and the visitation of the gods; modern man finds in them the "why" of his conduct. Everybody dreams. If anyone believes that he does not, let him set his alarm, put paper and pencil beside his bed, and start writing as soon as he awakens.

Primitive man gained the idea of the soul from his dreams. He slept, and in his fancy he hunted, feasted, and tasted all the possible sweets of his precarious world. When he awoke he found the vision fled, but, child-like, he still thought that to dream was to live. Who can say more for any truth than that it seems real to the one who feels it?

The cave man, a dweller in darkness with the hand of Nature against him, was comforted by dreams, for they gave him a "double," a "shadow," a spirit apart from the body—a spirit that he could know as his protector, as a good spirit. They made life become a wondrous adventure for him. The birds of the forest, the flowers of the plain, and even the stones of the mountain, took on a meaning;

they had a soul. No longer need he fear death, for when the body was as the dust, the soul somehow lived on. Did not the souls of his friends and beloved come to console him in that strange life of darkness, the dream? And did not the souls of the wronged moan in the night air and haunt the sleep of the malefactor? Thus, in those early days, in dreams the good comforted themselves while the wicked shrank from the visitations of the spirits who tormented them.

Ancient man, who put his faith in oracles, brought them his dreams to decipher. And the priests of the temples, the soothsayers and the wise men, bit into their beards and nodded as the anxious brought them the jumbled fragments of another world—an existence of unreality to unravel. Having listened and pondered, they gave counsel—and, if we are to believe the writings of those times, surprisingly good counsel, though there were no psychologists or psychoanalysts to help them in the art of understanding dreams. They found in them portents of good and of evil that decided the destiny of families, of tribes—yes, even of nations, for did not the Delphic oracle counsel the Greeks in times of stress? Even the anthologists who wrote the Bible made use of the dream as an allegory to clothe prophecy in disguise.

### The Nature of Dreams

We moderns, like our ancestors, have never lost faith in dreams. A phrase such as "dreams go by contraries"; the use of numbers that occur in dreams as a choice in lotteries and gambling of all kinds; the hundreds of dream books that are offered for sale—all attest to the interest of the lay mind in man's "best friend."

The first success of experimental science led it to disregard the dream as having meaning and significance in the mental life of the individual. Indeed, there are many so-called scientists today who scoff and pooh-pooh all psychological interpretation of dreams: some dismiss them with a sniff, others with a sneer; and others are as unwilling to admit dreams to scientific analysis as orthodox medicine was loathe to treat mental disorders one hundred years ago. Yet, dreams are the fine-spun fabric into which are woven the pattern of man's invisible life—the unconscious. dreamer lives in an ideal world, open alone to him and to those gifted with vision and sympathetic understanding. Every man has two worlds: his waking life and his dreams. Who can say that, for his happiness, man is less at home in his house of shadows than in his barren land of reality? In dreams there is balm for our hurts, warmth of affection for those starved of love, the coming to life of all things wished for by man. Let us pity neither the poor, nor the rich, nor the defeated of life; pity only those who cannot dream!

Dreams are the true emancipators of the personality; in them the confines of reason are escaped, the chains of civilization broken. There is no need of sequence or logic here; the lion lies down with the lamb, day and night are one, time and space do not exist. Threads of gossamer spin out tales of unheard-of beauty; new worlds beckon, and we follow a Pied Piper who lures us towards infinity, trilling the music of the spheres.

Myths and legends and folklore are the stuff of dreams. They represent the collective cravings of primitive peoples seeking a beauty beyond the horizons and creating heroes and gods and demons out of the fantastic sleep of the ages. For the world was to primitive man what ours is to the young child; to desire a thing, one had only to dream it. And to dream was to possess it in truth. Wondrous as are the achievements of man, they pale beside the creation of

dreams: therein are built fairy castles turreted and towered; spires of cathedrals melt into the dome of heaven and vast organs throat glory there; there alone is found beauty without blemish, desire without denial, happiness without alloy. All that is of worth and beautiful in this life is the gift of those who had the courage to dream and to transmute their fantasies into the fabric of reality. Is it any wonder that philosophers and poets alike have at times looked upon our very existence as a dream?

Yet, with all the manifold importance of dreams in the scheme of our lives, there are still many who would belittle or deny them meanings. Philosophers have proved by logic that dreams do not exist, psychologists have demonstrated by reason that dreams are an illusion, the skeptic has destroyed their meaning by ridicule and the wit by humor, and the Church has shrilled its manifestos that they are the creation of Satan. But through it all, the common man has never lost his faith in their meaning and their revelation of the profound truths of his existence.

# The Scientific Investigation of Dreams

Man lacked scientific comfort and understanding to support the fantasy-children whom he so often holds dearer than life itself, until Freud published his "Traumdeutung," on the scientific investigation of dreams. Freud and his followers saw the interpretation of dreams as the single method of isolating and interpreting the conflict of motives that make for neurosis and other mental disorders. What follows owes much to their theories, but our exposition endeavors to include all that is accepted by the various schools in their interpretation of the rôle of dreams in the psychic life of man.

Dreams may be a response to outer or to inner stimuli. These stimuli usually come within twenty-four hours

before the dream, although they are responsible for it only in the sense that by association they serve to set off, or to start in motion, buried memories. For example, a man suffered from rhinitis, a head cold associated with certain sexual experience, and invariably he had the same dream on the first night of his illness. This indicates that the popular belief that dreams are due to stomach disturbance is true only in the sense that a restless night due to pain or to other abdominal discomforts makes it easier to remember our dreams. Thus, if you are a sufferer from a periodic disturbance of the stomach, it is altogether probable that similar attacks—even if years apart—will act as stimuli and will provoke the same dream with which they are associated in your life experience.

Freud found the dream in scientific disrepute; it was regarded as sheer nonsense and as a field for fakers and fools. But he soon saw that science had discarded one of the most profitable approaches to the study of the human personality, normal or diseased. Freud saw that dreams were governed by the law of psychic determinism; as in the physical world, nothing in the mental world occurred without a cause or a purpose. And the further he plunged into this universal activity of man, the clearer became the nature of this process. He pieced together fragments and "meaningless" symbols and was soon able to derive their meaning, which checked with the individual's behavior and life experiences. In his great work, "Traumdeutung," he has given us the fruits of his labor, the science of dream interpretation.

He found that the dream is not bound by the elements of time; as we well know now, dreams which seem to take many minutes or even an hour, actually occur in a few moments of our sleep. We dream as the drowning man is supposed to see his entire past come before him in his

struggle. Nor do the principles of logic need to operate in the sphere of dreams; animals may and do speak; the laws of gravity need not be in force; all the contradictions of waking life may exist in harmony. And, most important of all, many social taboos and morals need not be heeded This is the cornerstone of Freudian dream in our dreams. psychology: the dream is a process of unconscious thinking, and its chief function is to express wishes forbidden in our waking state. The dream becomes man's mode of wishfulfillment. Here he may solve all his problems, resolve all his conflicts with reality, and find gratification of antisocial cravings through a form of hallucination; for, contrasted with reality, the dream acts as if it were true. To permit infantile cravings, frustrated desires, or abnormal sex impulses to parade openly or only thinly disguised through the streets of the dream, the dream must often resort to symbols, and so it becomes a drama or allegory which is intelligible only to those who understand the language of conflict—the dream as a form of human art. Art it is, because its aim, like that of Oscar Wilde, is "to reveal the art and conceal the artist."

In most dreams, the identity of the dreamer is disguised; but the process of identification, which is active in dreams, soon locates him in the rôle of the hero, and her in that of the heroine. The mind asleep is a stage, and upon it the drama of the dream nightly weaves its story. All the parts are written by you for the dream, just as much literature is autobiographical. The villain of the piece speaks your thoughts and your wishes and your hopes, as projected by you. And, like all formula plays, the dream has a happy ending, even though to bring it about it is necessary to injure or kill some of the other characters!

The stimuli that rouse hidden wishes, early and forgotten experiences, and the frustrated hopes of which the tapestry

of dreams is woven, are called the *determinants*. We are constantly exposed to stimuli such as life situations, odors, idioms of speech, and colors with a particular meaning for someone, which serve to set off associations that we think have been completely banished by time, but which, in reality, lie dormant in our unconscious. Thus, the sight or the mention of an old friend or enemy will give us a dream whose contents relate to the stimulus.

The dream solves our problems and realizes the wishes involved in it. Unless this happens, we are plagued by our conflicts and cannot rest. Insomnia, indeed, is one of the most common of mental disorders; sometimes the conflict is too strong and can not be woven into a dream, and sleep becomes difficult, if not impossible, to obtain. The following is an example of such a situation:

Isabel Winter was a young matron of thirty. Her husband' who was ten years older, had been married before. His first wife had been dead five years when he remarried. Now Isabel's mother, who was very attached to her daughter, objected to the marriage, saying that Mr. Winter was not their social equal. But despite this objection, the marriage began happily.

Then Isabel learned from a neighbor's gossip that her husband had been seen weeping at his first wife's grave. She accused him of ceasing to care for her, and he denied it. After a row, they made up, and all seemed well. But from that night on, Isabel suffered from insomnia. One night she found that she could not sleep in the same bed with her husband; the next night, she found she could not sleep in the same room with him; and, on the third night, she found she could not sleep in the same house with him. After four nights of wakefulness, she returned to her mother's house and enjoyed a sound sleep.

But the next night she was again unable to fall asleep when alone—only when her mother shared her bed did she find repose. Then she became so that she could sleep only in her mother's arms. And finally, after six months of the agony of insomnia, of hours of weeping, and of telling the author how much she loved her husband, she leaped to her death from a hotel bedroom.

In this case, the conflict had been partially solved by her resuming the infantile situation, where all her desires were satisfied in the arms of the mother who had formerly rocked her to sleep. But the fear of losing her husband's love, or the feeling that he had never stopped loving his dead wife, grew so that she was unable to solve the problem even by regression. The inability to shunt her problem into the realm of dreams, where her anxiety could have been momentarily relieved and the peace of repose could have soothed her agony, brought on her suicide.

Dreams bring sleep by warding off external stimuli or by converting them into visual images by a dramatizing power. Thus, a man kicks off the bedclothes and dreams he is in the Arctic regions. The relation here between the external stimulus and the dream is evident, although it must be recognized that the cold stimulus has merely started a process which must be interpreted as something more than a reaction to a chilled body surface. On the other hand, internal stimuli due to the pressure of instincts in conflict—Isabel Winter was torn between love and fear—are given free play in the sleeper and allowed to find satisfaction. Thus, sleep is achieved; but sometimes, as with Isabel Winter, the problem refuses to yield to the persuasive efforts of the dream. Then the victim suffers from insomnia until the issue is settled by other means.

# The Interpretation of Dreams

Dreams serve as a normal outlet for repressed wishes and thus prevent neurotic trends. Through their interpretation we learn the nature of the conflict going on in the unconscious and understand the process of personality formation, normal and abnormal. In addition, dream interpretation allows us to penetrate the veil of infantile amnesia, for very few people can remember any experience

before the age of four, and in this forgotten mental material may lie the trauma whose wound is causing an adult character twist.

A child's dreams differ from those of an adult. The youngster has much less repressing power, and his frustrated wishes and hopes often appear as frank satisfactions in the dream. If he cries for a buggy, he has only to fall asleep to possess it. His dreams are usually fulfillments of wishes ungratified the day before. In the adult, the repressed wishes—especially those of a sexual nature—appear disguised and distorted, since the censor, though relaxed, is active.

The dream must be regarded as a symptom and as the language of conflict. It is fantasy in its purest form and represents satisfaction by hallucination. It is an expression of unconscious thinking, a mirror of our underlying psychical processes; it is the picture of the compromise between the demands of repressed impulses and the resistance of the psychic censor. In dreams we shed—for the moment—our morals, only to reassume them in the waking state. The pleasure-pain principle is active here, too.

Since the dream allows unconscious and unsocial desires to become conscious, it is necessary for these repressed desires to adopt disguises, or to become caricatured as a distortion, in order to pass the censorship of the super-ego. As we now see it, it is a complex process, with many elements necessary to fulfill the functions assigned to the dream in our mental life.

Every dream has a manifest content, the surface story which we remember upon waking. Although it seems to tell the complete tale which we lived in sleep, it is only a make-believe, a front which hides something else. It acts as a starting point from which, by the technique of free association, we attempt to find the real meaning of the dream.

The significance of the dream is found in the latent content. This content contains a wish, taboo in the waking life, that is responsible for the construction of the dream. The following is a case in point:

A young woman who is very depressed remembers that, when she was a young girl, her father made her drown two puppies. In a recent dream, all the details of this childhood incident were pictured vividly. Since that time, she has been unable to sleep, and she spends all her time wringing her hands and moaning about this "frightful thing."

Now it is obvious that the manifest content of the dream she describes conceals something else, because normal people do not become depressed years after an incident which is part of many people's experience. Thus, by separating the dream into parts and by finding her association with them, the true meaning, or latent content, is found. It appears that the young woman had an abortion some months before. After weeks of fearing that her parents would find out, and having repressed her own feelings of shame and guilt at destroying a life, she seemed to have found peace. But the unconscious was stimulated by some determinant, and she dreams of this childhood incident. In this disguised, or latent form, she expresses the guilt and shame that led to her depression.

# How Dreams are Built

The latent is transformed into the manifest content by the process of dream work, a combination of dynamisms, or dynamic mental processes. Often, the manifest content appears confused, absurd, and chaotic; but interpretation shows the abbreviations, distortions, and translations bearing upon the mental life of the dreamer. The dynamisms, which are usually distortions, are: displacement, condensation, symbolization, dramatization, and secondary elaboration.

By displacement we put the accent upon an individual or an object not originally the cause of an unpleasant emotion. Thus, a "jilted" woman spits upon the picture of her

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inconstant lover. Or a husband, guilty of infidelity, becomes angry with himself for some petty dishonesty. Displacement occurs in a mistaken association: one idea acts as a substitute and receives the emotion aroused by another.

Condensation is the "telescoping" of ideas or of individuals. Many of our ideals are, in reality, condensations. Thus, a man's ideal woman would be a composite of all the social, moral, and æsthetic virtues; she would have the kindness and sweetness of his mother, the beauty of Venus, the wisdom of Minerva, and the grace of Diana. A woman may see as her ideal a condensation of Galahad and Apollo crooning like Rudy Vallee. Only by condensation are such things possible.

Words, ideas, and even life situations, may undergo condensation in the dream. A patient dreams of an enemy who is seen as always making speeches, inviting applause, and ogling a young girl in the audience. The ideas telescoped here are first, the enemy is a poseur and loves the limelight; second, he is vain; third, he harbors unclean thoughts and has "designs" upon an unsophisticated girl.

Symbolization, seen so frequently in the conscious as well as in the unconscious, is one of the most important dynamisms of the dream. The activity of the psychic censor, even during sleep, is strong enough to repress certain unsocial or tabooed unconscious wish impulses. In order to enter the dream and thus become part of our conscious mental life, such forbidden cravings must disguise themselves to elude censorship and repression, and one of the commonest masks adopted by such ideas is a symbol to replace a guilty with an apparently innocent concept. Simple desires such as hunger, thirst, and the excretory functions are directly visualized in dreams of the child. But even these may require the use of a symbol when the

individual grows older. Just as social hypocrisy forbids the use of words such as "urinate" and "defecate," so even in the dream the censor may cloak even this natural desire in the garb of a symbol.

Symbols have both a racial and an individual basis; many are based upon myths, legends, folklore, and the common archaic material of the race. But above all, we must recognize that, most often, we deal not as much with individual symbols—which are few in number—as with racial symbols. The thigh, the staff, and the snake are well-recognized universal symbols for the phallus and for the associated qualities such as power, domination, and procreation. The male organ is not infrequently referred to in conversation as a staff, the physical similarity making it a convenient symbol for those ignorant of or ashamed to use the scientific term. "King and queen" stand for father and mother; parting is the symbol for death.

A house is a fairly well-known dream symbol for the body—the "house" of the soul: thus, a tall building in a dream refers to a tall person; a low building to a short one. The foot is a phallic symbol as seen in dreams. Although it may mean speed and power also, it has, in the myths of the race, come to stand for fertility. The gods are frequently pictured making corn, wheat, and flowers grow where their feet have trod upon the earth. Civilized man, with his fitting of the feet with sandals or shoes, has increased the archaic value of this sexual symbol.

Fire is frequently a symbol of love. In our minds, the implication of passion is heat: we speak of people aflame with love, compare love to a fire that burns fiercely and then dies down; and the constant colloquial and literary use of this metaphor helps to carry over the symbol into our dreams. The lion is a universal symbol for courage; the tiger for ferocity of attack; the oak for sturdiness.

There are also linguistic connections between symbols and the idea they call forth in a dream: thus, a man who thinks of himself as fast on his feet, dreams of a race between two deer in which the smaller one wins. The explanation is that he is a small man who symbolizes himself "as quick as a deer," and that he conquers his opponent in real life, through a dream.

Bathing is a symbol which often disguises a fear in dreams. In many religions, there is a ritual of washing the body, the ablution symbolizing the purification of the individual from sin and evil. Thus, a man who has had an illicit sex experience dreams again and again of washing his body: the latent content shows a fear of having contracted a venereal disease and of the shame of possible discovery by his family. Such a symbol also appears frequently in the waking life of neurotics who have a mysophobia or fear of filth: these unfortunates daily spend hours washing and disinfecting themselves, convinced that they are in danger of having contracted a disease by handling or touching an object or person. Such a fear may be and often is rooted in the sense of guilt attached to some sex act. Hence the emphasis upon the intimate connection between the dream content and neurotic behavior; both can be interpreted as symptoms of certain psychic disturbances.

Sex is by far the most important instinctive tendency that requires symbolization in the dream, and there are many universal symbols behind which it endeavors to hide from the censor. One of its favorite tricks is called "upward displacement," which means that the difficulty is located above the center of the body. The face is frequently a location for this phenomenon—so frequently so, in fact, that men applying to a dispensary for treatment of venereal disease most often tell the nurse that they are suffering

from head colds! In this way, they think to save themselves the embarrassment of confessing the sexual character of their illness, the choice of the upper part of the body—instead of the stomach, lungs, or other organs—indicating an unconscious tendency for the oral cavity to serve as a convenient sex symbol. The symbol at all times serves to make the dream illogical and trivial; it permits wishfulfillment and thus allows sleep to continue undisturbed.

The necessity for sex symbols in the dream is caused by the disguise given sex even in conversation. Such a natural process as menstruation is concealed under symbols such as "the curse," and the "old lady"—one poet even symbolizing it as "the lunar disorder"! And the sex act itself is symbolized by supposed sophisticates and by the "emancipated" as an "affair." Is it any wonder then, that, if we find it almost impossible to speak naturally of sex, in dreams it should be concealed in devious disguises? Perhaps no small reason for the disguises is that in dreams sex cravings often appear in forms which disguise incestuous desires, illicit love, and homosexual trends.

But while the universal symbols can be recognized with more or less facility, where the insight and experience of the dream interpreter is good, it is important to determine the identity of individual symbols. And these are often difficult to track, since they vary with the life experience of the dreamer. The same symbol may mean different things to a dozen individuals because of different associations in their history. Three people are asked to symbolize the abstract idea of poverty: the first pictures a gaunt, hollow-cheeked man in a spasm of coughing; the second sees a ragged girl, with holes in her stockings, selling matches; the third describes a shawled, bent crone who shuffles along the street and begs in a mumble for alms. All three picture the same idea differently, although the word

means only one thing in the language they speak. Why? Because abstract ideas are symbolized in terms of our past experiences. The second man, for example, has given us the picture of Hans Christian Anderson's little "match girl," whom he wept over as a child and whose image was buried in his mind until released by the stimulus-word "poverty."

In order to understand individual symbols it is essential that we know the life history of the dreamer and any unusual episodes or meanings that may have become attached to some apparently commonplace idea or object. A woman, perhaps, shows an aversion to roses, and at first this seems absurd. But free association, which is the technique used to bring out repressed material from the unconscious as well as to analyze dreams, shows that roses have become her symbol for a childhood sweetheart who died at college. He sent her roses at the time of their parting. She herself has forgotten the painful occasion of his tragic death, but the word "roses" has called back his unpleasant, though cherished, memory.

We must decipher the code of symbols, universal and individual, if we are to unravel the tangled skein of the dream; for underneath the masks of apparently innocent and illogical characters, we—the dramatists of the piece—give voice to our hopes and fears, wishes and frustrations, instinct-impulses and taboos.

Dramatization is the dynamism which accounts for the pictorialization that is the essence of the dream. All the stimuli are converted into visual images and are staged in sequence more like a film than a play. The scenes shift rapidly, and when the last reel flickers and fades out, the lights go on and we pass into dreamless sleep—or we awake.

Secondary elaboration involves the filling in of the gaps of the dream when we awake and try to piece it together.

In the waking state, the psychic censor is more vigilant than in the dream: things that may have passed muster when he nodded now are censored and replaced by material more acceptable to the conscious and to the Ego. And so the process of obliterating or forgetting those parts of the dream which are taboo, begins and is helped by the dynamism of secondary elaboration. This may involve the insertion of material not originally in the dream. The longer we wait after waking to put down our dreams, the greater the tendency to secondary elaboration.

The process has its origin in the fact that the dreamer does not recognize the principle that dreams are not subject to the laws of time and space and logic. In recalling them, he endeavors to make them coherent and to bring them into line with the laws of his universe. This permits the censor to use his shears and to replace significant characters and episodes with meaningless ones. Hence dreams, if they are to be analyzed, should be written down immediately upon waking; then secondary elaboration is minimized and the true nature of the unconscious thoughts may be determined.

Dreams involve many other dynamisms to protect the sleep of the dreamer. Among these we find identification, inversion, reversal, transference and projection, with all of which we became acquainted in an earlier chapter. There is also the "double entendre," or double-meaning, play upon words, which through colloquialisms or popular slang affords a frequent way by which the distortion of the real meaning of the dream is hidden. It is important to observe that these processes are often used in the waking life as well, and that this fact in itself gives the lie to those who deride dreams as trivial, absurd and meaningless, and who call all interest in interpreting dreams as an element of psychic life "twaddle" or "superstition."

The greater the repression, the more the tendency to dream. This explains why we find that criminals have fewer dreams than other people. Those who do not inhibit or repress their anti-social desires—provided they are not the neurotic and psychotic criminals we shall study in a later chapter—have no need of many dreams, for their conduct is not likely to be a problem that will torture their consciences and keep them awake. On the other hand, children—especially those of the poor or the ignorant, who are denied most of their desires—dream frequently, day and night.

Truly it may be said that whom the gods would destroy they first grant all their wishes. Social conduct and the wholesome personality demand intelligent denial as a principle of character formation.

#### Varieties of Dreams

Dreams may be classified according to certain outstanding criteria which mark them as belonging to one or another kind of psychic experience. A simple form is the "convenience" dream, which represents frank wish-fulfillments of certain bodily needs such as hunger and thirst. It is very common among children. Johnny sees and clamors for a toy, but his mother denies it to him. So Johnny falls asleep and dreams that he has been given the toy he wanted so much. Very often the dream is so real—as with primitive man—that he cannot understand what has happened to the toy when he awakes and does not find it. Also, a variation of this type of dream is seen in what might be called the "sour grapes" dynamism. A child desires a pony, but his wish is refused. Then he dreams of the pony's becoming lame or developing some other undesirable trait. In this way he deludes himself into believing that he does not want the pony after all. Adults, too, not infrequently make use of this dynamism in both the waking and the sleeping state.

Paired dreams are interesting. The first depicts punishment of some kind for a wished-for and contemplated tabooed act; and the second, which follows a few minutes later, depicts the forbidden wish as completely gratified. Here the censor exacts payment in advance; then, when the dreamer has given quid pro quo, he is permitted to enjoy the guilty desire without breaking his sleep.

The anxiety dream is important and frequent. In it the dreamer seems to realize a fear which has replaced his desire, and he awakes trembling, sweating, and with his heart beating fast. The common nightmare belongs in this class. It is difficult to believe that so disagreeable an experience is the realization of a wish; yet, in a sense, this is true. The fear or anxiety which appears in these dreams represents an abnormal emotion and is seen in the aberrant conduct of neurotics. Normal fear operates to protect the individual, causing flight when danger threatens. But abnormal fear—as shown by neurotics—consists of such irrational conduct as: claustrophobia, the fear of remaining alone in a room; agoraphobia, the fear of going out into the open street; mysophobia, an unreasonable dread of disease from casual contamination by the environment.

Dreams also may mirror apparently absurd fears which feature the conduct of neurotics and psychoneurotics, again confirming the intimate relation of dreams to the symptom. In both instances, the anxiety has been displaced, or transmitted, from some hidden desire to the apparent cause of the fear. A man does not really fear the open street because he may be run over, or a high window because he may jump out. This fear is a symbol which masks a sense of guilt for which his unconscious believes he should be punished.

Anxiety dreams most frequently are rooted in the sex life of the individual, their content expressing a social criticism of certain manifestations, real or imaginary, of the sex impulse. This occurs even in the dreams of children. Direct sex is expressed as fear or anxiety in the dreams of adolescent boys and girls. It is most common in girls of about fourteen, who are as yet unadjusted emotionally to this new and disturbing factor in their lives; they dream of being chased, caught, and attacked. Boys' dreams show the male as a sex aggressor. Adolescent girls are particularly prone to suffer from dreams in which they are almost raped but awake "just in time," shaking with fear. An unconscious craving forces its way into the conscious, only to be replaced at the last moment by fear; and this is the work of the censor, who makes the last-minute rescue. Sometimes, however, the nightmare is completed before the rescue is accomplished, young girls of hysterical type showing these fantasies even in the waking state and not infrequently accusing innocent men of having attacked them. The tragedy is that in primitive communities accusation of rape is tantamount to conviction, and that more than one innocent man has paid with his life for a hysteric's fantasy of seduction. A few centuries ago, it was not uncommon for girls to awake screaming that they had been raped by a demon or evil spirit.

A patient relates this dream:

John came to see me and we quarreled. I slapped his face. He picked up a paper-knife, and although I struggled with him, he stabbed me in the breast. I awoke in a cold sweat, icy with fear.

By analysis it is easy to see here the unconscious craving for sexual gratification. The knife is the symbol for the phallus, and the stabbing in the breast represents coitus through the process of upward displacement. Her struggle with John is a half-hearted, hypocritical gesture, since she wanted to yield; it is an attempt to fool the censor. But the anxiety attendant upon waking shows that the disguise was not completely successful.

Anxiety dreams, like anxiety neuroses, are in effect a kind of punishment for tabooed wishes exhibited or gratified in the dream. Since most of us have been brought up on the idea of sex as a sin, as something unclean and filthy and degrading—except in wedlock, where it receives a grudging recognition as a necessary evil—it is to be expected that most anxiety dreams are rooted in sex pecadillos of one kind or another. Anxiety dreams represent an unconscious reaction to unsocial tendencies in which anxiety replaces the libido.

Brill and Bleuler have described the artificial, or made-up dream. The dreamer uses this technique when his resistance is so great that he does not seem to dream at all. If he is instructed to imagine a dream while awake, and without guiding his thoughts, often he protests that he cannot; the same resistance that keeps him from recounting his real dreams, operates to prevent his making one up. But finally he is persuaded, and lo!—the unconscious thoughts are revealed in the fabricated dream! They are so revealed because the wish motive is always active within us, molding our thoughts and conduct.

Brill gives us an example:

A thirty-year-old physician who suffered from a psychoneurosis said: "I dreamed that I was giving birth and suffering horrible labor pains. My friend John acted as accoucheur and stuck the forceps into me more like a butcher than an obstetrician."

Analysis showed that the dreamer had identified himself as a woman and that he was unconsciously in love with his friend, John, by whom he was having a child. When told that the dream indicated homosexual tendencies, he became very angry at first but later confessed that the diagnosis was correct.

The made-up dream represents the realization of a wish just as do the monstrous fabrications of the pathological liar. Both attempt to achieve their heart's desires by fantasy formation. So well do they lie that they are soon convinced that their stories are really true-which, indeed, is the liar's own punishment, since he must doubt himself even when he feels he is telling the truth. Lying represents an infantile reaction: the liar has never grown up, and his inventions place him in the narcissistic period of his develop-The poet fulfills in his poems his ungratified wishes, but he hides himself under the cloak of his hero, and thus his egoism, unlike that of the liar, never becomes offensive to us. The credo of Milton, Dante and other great poets, that divinity speaks through them, and that destiny guides their pens, is but thinly veiled egoism—although it is indeed a quality necessary to their grandeur.

Everyone has dreams in which he runs about naked while all others in the group are dressed. This type of dream is the fulfillment of a wish to return to that period of childhood when nakedness was no sin and life was a paradise in which there was no shame. This dream shows an unconscious but universal tendency to go naked: children beg to be allowed to run about unclothed, at least partially; adults go in for sun-bathing and swimming in the "all together." All the back-to-nature movements and the nudist cults feature this desire of man to rid himself of the clothes that hamper his freedom of movement and dampen the infantile joy in his own body. This tendency is so strong that it sometimes expresses itself in the socially and legally tabooed behavior known as exhibitionism and voueurism.

Dreams in which water is "seen" or "felt" have to do with birth. To plunge into the water means to give birth; to come out of it is to be born. This fantasy has its roots in the myths of the race and in the evolution of life itself,

which came out of the waters. Every human being, as a mammal, is born by being loosed from the "bag of waters" in his mother's womb. Fairy tales, such as the common one about the stork, tell of life coming out of the sea, rivers, or lakes. The story of Moses being taken from the river by the princess may be interpreted as a myth; in reality, probably she herself—not Miriam—was the mother of Moses, and the legend of Moses floating in the bull-rushes fooled the Pharoah, as it has countless millions since!

Hidden wishes, entertained in childhood but now long-forgotten, are the cause of dreams of death. Death is symbolized in the dream by the doomed individual's taking his leave for a long journey or a protracted absence. After our discussion of the parental, or Œdipus complex, it should not surprise us that the figures most often represent the dreamer's family. Death does not mean to a child what it does to an adult, and the *infantile* type of wish carries over most often and wishes for the removal of a father, mother, brother, or sister.

In addition to the incest motif, a child may desire the removal of the father because he is the source of authority and the cause of much pain and unpleasantness to him. Young children manifest open dislike very often of baby brothers or sisters who steal the spotlight from them and become their rivals for the affection and attention of the parents. It is common to hear a child say, "Well, let the stork take him back." Also, a young brother or a young sister who has been dominated by an older one develops an unconscious hate that is symbolized by a desire to be rid of the authoritative one. The ridding need not necessarily be by death, but may be by having them removed to another city, by their marriage, or by some other means.

A patient relates dreams that show he desires the death of his older brother. He is forty, and the brother is forty-five.

The patient reveals that his brother led him into perverted practices when he was ten. All through his life he has been under the domination of the older man. He made one effort to break away by becoming an artist; but in this he has only been partly successful, since he is still obliged to live on his brother's bounty.

Another reason for the above death wish is that the younger brother would inherit a large sum of money from the older. Consciously he would never admit this; but the unconscious is primitive and ruthless in its demands, asking only, "Will this do me good?"

Prophecy in dreams is merely the working out of a wish that has been long entertained. People dream of a death in the family, and the next morning a telegram comes, announcing the person has died. Now there is nothing of the crystal-gazing art in this. It is easy to find that death has been desired and dreamed of before in a more disguised form; the prophetic dream has only been more vivid and less concealed in its desire. Frequently, there is a hint, as when individuals suffering from chronic illnesses such as cancer and tuberculosis, are daily expected to die. We say of certain people that "they would be better off dead." In all cases of prophecy by dream, the wish has preceded the event and can be proven by analysis of earlier dreams.

Flying in dreams indicates ambition and a desire to have people look up to one. It is common among those who show an inferiority complex, and it is in reality a part of the process of compensation. By flying or soaring they symbolize their yearning to look down upon and be above people who in real life are their superiors.

### The Value of Dream Study

We learn much from the dream. As a man dreameth, so is he in his heart. We see in the dream the fulfillment of

forbidden wishes, the achievement of happiness denied us in the waking life, the disguised expressions of the sex impulse. Through the dream we can penetrate the veil which hides the childhood years behind the wall of amnesia, and in that forgotten land we come upon the spoor of the beast who ravages us as adults. It is the means by which the conflicts that mar our lives are most often expressed. Dreams mean conflict; for were there no bar to our desires, we should have no need of dreaming.

In them we find the key to behavior, normal and abnormal. They are the products of our unconscious thinking; they represent infantile and primitive wish formations, and are governed by no laws, of time or space or reason. In them we see ourselves often as little children, unaware of shame or sin or guilt until the psychic censor stamps the dream with the seal of society. We learn from dreams why we behave like human beings. They are the drama of each man's life as he would like to live it; they mirror his hopes and fears, his desires and frustrations, his avowed goals and his hidden purposes. Truly may it be said: "Tell me his dreams, and I will tell you what manner of man he is."

Above all, dreams are the key to the understanding of the mental disorders called the neuroses. These disturbers of the peace of the modern mind are like dreams, the children of conflict. It is to them we now address ourselves in an effort to determine whether happiness is really possible for us.

#### CHAPTER XI

# Personalities in Conflict

### The Character of Neuroses

A NEUROSIS is the silhouette of a personality against the background of his heredity, and it is explicable in terms of a faulty psychosexual development. Such maldevelopment is caused by physical or by psychic traumata, wounds that excite and bring on the neurosis.

Of course, everyone has some such conflict. In the unconscious there is a constant war between tabooed cravings and the demands of the Ego and of reality. And, as we have seen, the sexual impulse is very often the cause of this warfare, since it is without doubt one of our two dominating instincts. Civilization forbids its direct gratification and thwarts it constantly, this frustration being effected most often by sublimation, for the good of the race. Thus is built our culture, our morality, our religions, —or, if sex breaks through in antisocial forms—neurosis and crime.

The neurotic's abnormal behavior is really a morbid exaggeration of normal mental processes, his actions differing from those of the "normal" man only in degree, not in kind. Even the insane are but caricatures of personalities as they were before disorders set in: nothing in them has been changed in quality—the personality has, so to speak, been reduced to a *logical* absurdity. The neurotic is therefore our brother still. Do we not find in nearly

everyone the abnormal dynamisms that produce abnormal conduct? Are not these dynamisms in the "normal" person merely less overt? Do we not find by analysis of our own mental processes that we suffer from various degrees of maladjustment that we barely manage to conceal?

The World War, which showed us the dominance of the Ego, or instinct of self-preservation, told us much about The avoidance of death became the chief the neuroses. concern of millions of so-called normal individuals. No one had suspected previously that they were anything but sane and rational in their outlook, yet the demand to live of their unconscious was so strong that they found flight in neurosis -in "shell shock," hysteria, and anxiety states. They showed that neurotic predispositions were "sleeping dogs," content to doze until awakened by some shock and danger, and so suggested to us that "normal" people are only those who seem to behave in the expected manner and do not show outward signs of conflict. Truly, we have found, "there is a neurotic in every home." The duty of society, therefore, is to realize fully that everyone contains the bud of a neurosis and that only education, the practice of mental hygiene, and a properly controlled environment, will develop us desirably.

Conflict and mild neurotic symptoms, which often show themselves as Weltschmerz (sorrow for the world) or Weltanschaung (world vision), are often the inspiration of genius. The truly great find obstacles the motive power to attain their artistic goals; they gain strength from resistance; from the imbecility of a social order with mud-bound feet and eyes that scan no distant horizons, they gain courage to persevere. The Heines, the Wagners, the Gaugins, and the Thoreaus work out their genius through their "sick soul" philosophies. Neurotics all, but what neurotics!

Genius needs the spur of neurosis and the delusions of the mad to reach the heights. The progress of humanity thus has always been through the rebels who swam upstream.

The transition from the neurosis to the psychosis is often very gradual, and we find it difficult to decide whether we are dealing with incipient insanity or with a deep-seated neurosis; whether the hypochondria marks the somatic delusions of dementia praecox or the advanced stages of a neurosis. Another difficulty is that the type of disorder we see nowadays is a reaction on a psychic level higher than that with which Charcot and the pioneers in mental science were wont to deal. It is seldom that we meet with hysterical paralyses and mass hysteria—except for the recent episode at Malden, Massachusetts. There we saw the medieval picture of the halt and the lame and the blind, coming to the grave of a priest who was reputed to work miracles. Many came, but few were chosen!

Among the multitude was a former patient of the author. He had been a practical nurse in a hospital with which the author is connected, and had been in perfect physical health; so the author was greatly surprised to hear that he came to the grave on crutches and knelt in prayer, saying, "Oh Lord, I have been crippled since birth. Let me know what it is to walk like other people." After a few moments, he was seen to rise, with ecstasy depicted on his face, and begin to stumble about in the manner of a child learning to walk. He threw away his crutches and sobbed at the miracle, while the newsreel cameramen turned their cranks. triumph, however, was short-lived. The owner of a surgical store, seeing his picture, told the police that the supposed lifelong cripple had walked into his place of business and had purchased the crutches for a relative, one week before. Hence our friend-who was an exhibitionist, as the author knew from previous experience—soon found

himself in jail as a faker. Now he will surely need a miracle if he wants "to walk about like other people"!

This kind of neurosis, we repeat, is not common today except, perhaps, that caused by the war, in which physical disability was necessary in order to get the individual away from danger of death. The common modern neuroses do not express themselves in such gross physical symptoms. Instead, the picture is studded with anxieties, phobias, and obsessions, these indicating an emotional outlet for the conflict at a higher psychic level. This change may be explained in two ways: First, by the diminished use of the technique of hypnotism and suggestion which, in the hands of men like Charcot, was often responsible for the induction of grande crises and paralyses. The patients in these instances acted as was expected of them and could quickly be cured by the same technique that had induced the crises. Second, by the fact that the increase in general culture and the raising of the general level of education makes for back-sliding to a higher rather than to a lower pattern of behavior. The increase in intelligence brings with it more individual neurotics—a fact exemplified in that there are twice as many white as black neurotics in the United States.

Another reason for this change is that, as civilization grows more complex and the conflict more intense, we find it more difficult to secure emotional outlets in what may be called neurosis of the social order. Former communities secured a definite release from emotional tension in the trials and burnings of witches; in the medieval preoccupation with demons and vampires; in the hue and cry at the autos-da-fé of the Holy Inquisition, during which thousands of victims were sacrificed while the mob howled with glee, the flames crackled and hissed, and the cries of the tortured rose to an indifferent heaven. Release from their

pent-up emotions also came to many in the watching of public executions. Such events made holidays: all the townspeople assembled, and from miles about came even the farmers, and all paraded before the gallows, finding sweet surcease for their sadistic impulses.

In nineteenth-century America, the collective neurosis was afforded an outlet through the revivals and cults, which were characterized in the main by excitement, exaltation, fits and convulsive seizures, and not infrequently, by orgies, sexual and otherwise. Today—as in the eleventh century, when neurotic Christendom found its deturgescence in the Crusades to reclaim the Holy Land—we find thousands seeking peace from their frustrations in reclaiming Protestant America from the "Koons, Kikes, and Katholics" under the spiritual guidance of the Ku Klux Klan. Of such a nature, too, was the crusade led by a maker of automobiles who dreamed of a diabolical plot to seize the world: he and his followers found in their crusade of hate a substitutive satisfaction for the cravings that gnawed their hearts. As similar outlets, the lynchings of Negroes in the South-modern versions of the auto-da-fé-need little delineation.

Czaristic Russia and its politicians knew how to invoke the collective neurosis to save a tottering state. On the brink of revolution in 1905, they found war with the Japanese a convenient channel to drain off the hate rooted in the misery and oppression of the peasant. At other times, they used *pogroms* against the Jews to displace the collective anger that fermented among the peasants. In murder and rape and pillage, also, the mass found temporary release from the emotions smoldering within them.

During the last decade, however, we have recognized the utter lack of intelligence which underlies the social neurosis, and we refuse to approve of such a common subterfuge. Hence, finding no outlet, the individual has found it increasingly necessary to seek his own pet neurosis if he would compromise with reality. We moderns find neuroses a luxury in which we must indulge ourselves if we would live.

The intensity of the neurosis varies with the individual and his ability to solve it by repression, regression or sublimation, as well as with his hereditary capacity for adjustment. All neuroses show an attempt at repair and are compounded of normal and abnormal conduct. The conflict arising in faulty psychosexual development eventually results in symptom formation. These are the excuses the neurotic offers to the world for his failure to act as a normal person. A bachelor attached to his mother deplores his "nervous heart" and uses it to explain his unmarried state; a rake overcomes his unconscious guilt by preaching the double standard and demanding virginity in the woman he wishes to marry; a hypochondriac explains his interest in medicine as that of a scientific spirit, whereas he is in reality hoping to find a cure for his own symptoms. Since these signs of the conflict are found here and there throughout all of the mental disorders, it is well that we acquaint ourselves with their nature.

### The Phobias

The phobias are most common to all types of neuroses. They are morbid fears and differ from the normal emotion. The latter is protective and motivated, while a phobia is vague, is not attached to a rational idea, and is seemingly unmotivated. Sometimes they are general, and the individual will say: "I don't know why I worry so. I have everything in the world to live for and nothing to be afraid of. But I am afraid. Sometimes I get into a perfect sweat without any reason that I know of." Most phobias,

however, are specific, such as agoraphobia, the fear of open spaces. Anxiety is a sort of mother to them.

The origin of this distorted emotional reaction is disputed. The most common and most reliable explanation is that a phobia is an acknowledgment in the conscious of guilt for some repressed idea in the unconscious. Freudians say that the sense of guilt that gives rise to the morbid fear is rooted in some tabooed desire or is an expression of the sex impulse; others say that it represents a guilt and selfreproach for some forbidden act in the past. But whatever the nature of the incident, the individual has forgotten it (it occurs nearly always in childhood), the original emotion having become displaced to a new and irrational object. A man suffering from a claustrophobia, the fear of remaining in a room or in a closed space, knows and says that his fear is groundless and silly; but if compelled to remain in such a place, he will become panicky—he will sweat, develop palpitation, and may become paralyzed with terror.

Sometimes the phobia represents a repressed wish, as in the fear of burglars, seen most commonly to an abnormal extent in old maids. In such cases the fear may be but a thin disguise for a hope. For phobias, as we have seen, may be associated with dreams as well as with the waking state: there they most often are symbolized and identified with a character—often not the dreamer—and are associated with anxiety.

The study of fears in children by Watson and others has shown that they arise as a *conditioned reflex*. Such fears occur when the original stimulus is replaced by another which causes the same response. The following example will make this process clear:

A child reaches for a goldfish bowl near a window, and just at that moment he is terrified by a burst of thunder and a flash of lightning outside the house. He drops the bowl

he has picked up and begins to howl with terror. Thereafter, since he does not know the laws of cause and effect, the sight of a goldfish bowl precipitates an attack of fear and panic within him. If his parents are unintelligent, they ridicule or even punish him for being frightened by such a harmless object as a bowl of goldfish. Now the child has forgotten about the thunder and lightning; the bowl merely symbolizes what to his mind was a warning of punishment for handling an object that he had been forbidden to touch. Thus he is now conditioned, and every time he sees a goldfish bowl he will howl with fear; or, if he is afraid of his parents' ridicule and contempt, he will quake inwardly.

This conditioning, which Hollingworth has called redintegration—the reinstatement in consciousness of a complete idea by the appearance of a part of a complex stimulus—is also the reason why primitive man, like a child ignorant of cause and effect, established many of his taboos and superstitions. However, if children suffering from such fears are intelligently handled, they may be unconditioned, the painful association being removed by gradually alloying the feared object with pleasant things such as food.

Such studies prove that fears—whether conditioned by such incidents or connected with the psychosexual development—that originate in childhood, may be aroused from their sleep in the unconscious and come to invest an idea or a harmless object in the conscious of an adult, causing a neurosis.

Henry Simmons suffered agonies when forced to remain in a building with a large number of people. During his freshman year, he left college several times, returning only because of his parents' entreaties. Henry could give the author no logical explanation of why he feared closed spaces. He admitted it was ridiculous and silly, but said that he simply could not force him-

self to remain in a building full of people without becoming panic-stricken.

Persistent inquiry finally revealed that, as a small boy, he had climbed with some other boys over the gates of an old school building to play in the court. Suddenly, they were alarmed by the custodian, who threatened and yelled at them. The other boys got away, but Henry ran through a door which slammed shut behind him. The custodian pounded on the door—it was an empty store room—and threatened him with all sorts of punishment if he didn't come out. Henry shivered with terror. Then he noticed an open rear window and made his escape without detection. He did not tell his parents, because he knew he would be punished for playing in a forbidden place. The incident seemed forgotten until something in the look of one of the college buildings set off in his mind this repressed memory with its original emotion, and he developed an intense claustrophobia.

Henry—as most others do—found relief in recalling the incident, and the phobia soon disappeared.

Margaret Niles had a paroxysm of fright every time she had to cross an open space, such as a street. She avoided going out of her home because of this dread, which she admitted was silly but which she was powerless to check. She would go out only when escorted, and in crossing a street she would grip her escort's arm and tremble until she was safe on the other side.

One day she was forced to leave the house on an errand alone. She started to cross the street, reached the middle, retraced her steps, started back again and stood stock-still in the center of the road, paralyzed with fright and with a dread of death. Although no vehicles were coming, she could not get across the street until a policeman came to her aid. After this experience she was in bed for a week, on the verge of a collapse.

A painstaking search of her childhood showed that, upon one occasion, Margaret and a friend had attempted to cross a street, despite her mother's orders to the contrary. The other little girl, who was slightly in advance, was knocked down and killed by an automobile, but Margaret escaped without a scratch. The experience supposedly had been forgotten, but at last it was set off by some stimulus which had reanimated the old painful memory and forced it into consciousness as an agoraphobia.

William Ellery Leonard, an American poet, describes in the "Locomotive God" a phobia from which he has never been able to recover. Early in childhood, he suffered a severe psychic trauma in a railroad station as an engine came clanging in. He developed, shortly afterward, an intense dread of vehicles of all sorts. He cannot hear, without fear, the horn of an automobile, the bell of a street car, or any loud noise which simulates the noise of that engine. He knows that his fear is groundless, but he is unable to rid himself of it. The original effect has become displaced to all vehicles, and he is condemned to live in a small town and within walking distance of the university at which he teaches. For years he has not ridden in a vehicle, and the radius of his activities is bound by the distance he can cover on foot.

This is another example of the conditioned reflex in action. In effect, what happened was a kind of short circuiting in the brain: the original idea, probably associated with some tabooed act or wish in which his father was concerned, shifted its unpleasant nature upon perfectly harmless objects. Hence, where phobias are concerned, we may modify the well-known phrase and say, "Cherchez l'enfant!"

Another kind of phobia is associated with the fear of disease. Individuals may have a baseless fear of such diseases as tuberculosis, cancer, and—most often—syphilis. Syphilophobia is the most frequent because of the "sin" attitude towards sex: syphilis is a "punishment" (yet often the rake is free while the innocent burns!), and to suffer from it is a social disgrace. It frequently masks an unconscious craving for sex potency, also, although most often it is a neurotic form of punishment which the individual visits upon himself to make up for repressed and antisocial sex tendencies, or even illicit sex experiences. Such a case was the following:

Sam Stern, a young man of twenty-eight, was possessed of a syphilophobia. He went from doctor to doctor, convinced that he was a victim of the dread disease. All examined him and made blood examinations, which were negative. But Sam was never satisfied. As soon as a physician told him there was no evidence of the taint, he left him to seek out another. He finally developed a deep-seated psychoneurosis that necessitated sanatarium treatment.

The history finally revealed that Sam's first sex experience had been with a prostitute and that he had been impotent. He hated his father, but was very much attached to his mother. Sam refused to see his father when he came to the sanatarium, and he confided to the author that he believed he had inherited syphilis from his father. I examined Mr. Stern but found no evidence of the disease. But even then Sam would not retract his belief that his father was the cause of all his trouble, and he continued to deny himself to him upon later visits.

The cause of the phobia in this case may have had two origins. The first, and probably the truer, was Sam's probable desire to eliminate his father as a rival for his mother's love by proving him a syphilitic, unfaithful to his mother and therefore not worthy of her love. The second was that Sam's only sex experience, in which his impotence was probably psychic, endowed him with a sense of guilt for which he was attempting to atone by punishing himself with the anxiety involved in his phobia. Or, he may really have believed himself impotent, and the ability to contract syphilis may have served to relieve his doubts as to his manhood. Incidentally, he regressed very rapidly, and because of this no progress was made, despite repeated attempts to show him the illogicality of his phobia.

The extent to which neurotics will go to justify their phobias is illustrated in the following case:

Henry King was the son of a banker. His father's bank failed, and the elder King was sent to prison for misuse of his depositors'

savings. In prison the father developed tuberculosis, and died after a lingering illness.

Henry felt the disgrace very keenly, and he finally left the firm for which he was working, because he thought "my fellow employees are whispering things about me." Shortly afterwards, he developed a cough and began to lose weight. The family doctor, having the father's illness in mind, told him to beware of tuberculosis. Although neither the X-Ray nor his sputum showed the characteristics of tuberculosis, Henry became convinced he had the disease. He wandered from doctor to doctor, although all were certain he was free of tuberculosis. Finally, he managed to get into a sanatarium for observation, and, in a short time, he began to show the occasional hemorrhages and afternoon rises of temperature that are so common among sufferers from tuberculosis. When visited by the physician, he spoke with a gleam in his eyes about his "ruby"—the patients' slang expression for bloodstained sputum.

But, after a few weeks, the doctors were unable to find any physical evidence of lung disorder. Then he was watched, and it was revealed that he concealed a hot-water bottle under the covers while his temperature was taken, and that the supposed hemorrhages were nothing more than red ink which he put into his sputum cup.

His tuberculophobia was evidently based upon an identification with his father, and he was attempting to expiate his unconscious guilt by punishing himself with the dread of a disease he did not in reality have. Starting with a common cold and cough, he attempted to imitate his father's last illness. A gradual readjustment brought about the disappearance of this morbid fear.

An interesting and common fear is *mysophobia*, the dread of dirt or contamination.

Madeline Grayson was a young married woman of twenty-seven. Shortly after her husband returned from one of his business trips, she became restless and anxious, and she developed an exaggerated fear of dirt. Formerly never a painstaking house-keeper, she now began suddenly to devote all her day to scrubbing her house, again and again, though it seemed spotless. She washed and wiped every dish from which she ate. Immediately

after she had touched an object, she would go to wash her hands. She refused to shake hands even with old friends, saying she was afraid of becoming diseased. Finally, she began to spend her entire day scrubbing her hands over and over again. She met her husband's questions with tears and admitted she was silly, but she was so afraid she was "going to catch a disease and die."

After the patient's confidence was gained, she confessed that she had been unfaithful to her husband some months previous, while he was away on a trip. She explained that she had regretted and forgotten the incident until a question from the author had unearthed the repressed memory, whose effect had been displaced and had appeared as mysophobia.

Her trouble was but another example of how neurotics punish themselves, hoping thus to gain relief by squaring their "inner conscience."

This phobia which finds expression in a continual washing of the hands supports the theory that phobias are based on a sense of guilt connected with some repressed complex. Washing the hands is a rite indulged in by many peoples as a symbol of purity and of expiation for sins. Lady Macbeth knows that she cannot wash away that "damned spot," for the memory will remain in her unconscious to torment her after the spot is gone.

Other phobias are zoophobia, the fear of animals; anthropophobia, the fear of men; pyrophobia, the fear of fire; and phobia-phobia, the fear of being afraid.

# Anxiety

Anxiety is the most common of all neurotic symptoms, but it is particularly associated with an anxiety neurosis and an anxiety hysteria. It is also a component of the anxiety dream, wherein it substitutes for a disguised wish. Unlike the phobia, which may be a precipitate from it, anxiety is vague rather than specific.

Anxiety is a morbid exaggeration of the normal emotion, and it comes upon the victim suddenly, often throwing him into a panic. It has no conscious rhyme or reason; the sufferer knows it, but despite his insight he may cower in terror of a dreadful end. He is in a state of apprehension, shrinking from reality, pale and sweating, with heart pounding, and vague as to what direction "the blow" is coming from. It is seen often among the insane who suffer from manic-depressive insanity and involutive melancholia. Such people are weighed down by it, and sit about crying and wringing their hands. It is associated in their minds with the characteristic delusion of having committed an unpardonable sin, even though they cannot tell the nature of their act.

Anxiety is acute and episodic. It is of terrifying reality to the sufferer, despite its apparent absurdity. He *knows* he is "going crazy," or that he will "die a sudden and horrible death." He cries, "This is awful, terrible! What shall I do? What can I do? Please, please help me, Doctor!"

Stuart Jones developed an attack of anxiety one week after his father died of heart disease. Stuart awoke in the middle of the night, his heart pounding; he was breathing rapidly and had a "lump" in his throat. He begged his wife not to leave him; he was sure he was going to die. He was nauseated and covered with a cold sweat. After many hours of reassurance, the attack wore off, and he became calm.

From a dream he recounted it was easy to see that he had entertained in his unconscious a death wish against his father, who had treated his mother rather brutally. His attack of anxiety represented a conscious punishment and was an admission of guilt.

Very often anxiety states are the results of frustrated sex cravings, or are symbolic of unconscious homosexual tendencies. But above all, anxiety is a symptom par excellence to show that conflict is the fomenter of all mental disorders.

Sarah Devine, who was an unmarried woman of thirty, developed weakness, nervousness, trembling, and palpitation of the heart. On one occasion, in the presence of friends, she suddenly became pale, vomited, and began to moan: "I'm going to die. I'm going to die!"

After the attack subsided, she became depressed and insisted she was going to "go crazy." For weeks she continued to have attacks in which she became weak, broke out into a cold sweat, had palpitation, and felt as if she were about to die. Through it all she would weep and moan, but she could never give any reason for her anxiety. Many doctors examined her, and finding no physical evidence of disease, told her to "go away for a rest and quit worrying," or she would "have a nervous breakdown." But despite this sage advice she kept getting worse.

Investigation showed that the origin of her condition lay in the thwarting of her sexual impulse. She had read somewhere that masturbation caused insanity, and her symptoms had dated from that time. It needed but a number of talks with the patient, and her coöperation, to bring about an improvement.

Compulsions appear as defense mechanisms and are repeated over and over again in order to reassure the sufferer and overcome his doubt. This doubt appears as the folie de doute, in which the individual is in a perpetual state of disbelief. He will spend hours, and even days, checking commonplace statements; he will thumb the dictionary in frantic search for the meaning of words which are in common use but which he is compelled to doubt. He is the ultimate in skepticism. He may even disbelieve that he doubts.

The formula of reassurance, which represents a species of white magic and belongs in the realm of primitive rituals and superstitions, is designed to ward off evil, of which he is afraid because of unconscious guilt. It takes many forms, the commonest of which are: touching each and every post along a street; stepping on or over the cracks in a sidewalk; putting on each article of clothing in the same order every day; using the same streets to and from the office daily; making meaningless notes when listening to someone on the telephone; and kicking loose objects from the sidewalk to the gutter.

Compulsions are seen in people of higher intellect and mark a regression to the pregenital phase in the development of the individual. In such a neurosis, there are often betrayed unconscious homosexual trends, these being responsible for the guilt which occasions the compulsive act. Healy has shown also in his studies of juvenile delinquents that frequently a double initiation into sex and thievery has taken place, and that this causes thieving to arouse a desire for sex, and vice versa. The process here is the conditioned reflex, which we saw also acting as a short circuit to produce certain phobias. It is well known that kleptomania has a definite relation to menstruation and to the sex impulse in the offenders.

Compulsions resemble the reactions seen in the form of insanity called dementia praecox; negativism, the doing the opposite of what is asked—such as lying down when told to rise—is a related form. It illustrates the principle of ambivalency, which is seen also in the compulsive doubts. To point out the absurdity of the underlying obsession and the resultant compulsion only serves to fix it more in the victim's mind; he will admit its lack of reason but goes on doing it just the same.

That anxiety may come on when the compulsive ceremonial is broken up is indicated by religious fanatics who may, by imprisonment or hospitalization, be deprived of the protection and absolution granted them by their formula. This is particularly true of converts who seek to make up by multiplied zeal for the years they have spent "in darkness" and "without grace." Indeed, the zealots of all religions who substitute ceremonial and formulae for meditation, raise serious question as to whether or not they should be considered as pure specimens of neurotic compulsions.

Compulsions may be considered also as symbolic of revolt. They are rooted in infantile repressions and still bear the imprint of parental domination. These acts in adults, then, become the flag of rebellion; just as if the unconscious has harbored, all during the years, these thoughts: "Can't do it, eh? Don't do this and don't do that? Wait till I get older. I'll show them what I can do!" It is a fact that where father-dominance has been particularly severe, compulsions occur with greater frequency. The acts may occur in children and do not seem to be directed against the parent. But the child asserts his independence in this way, by doing what he wants and when he wants, just to prove he can.

Compulsions last a long time and may disappear only to reappear in a new form. They vary in intensity; indeed, many "normal" people indulge in mild compulsive acts which they either dismiss with a shamefaced laugh as their pet superstition or refuse to discuss as partaking of the nature of a sacred cow. You may recognize some of your friends' peculiarities as the mild variety consistent with normal activity.

Compulsions may be set off by trifles. An inconsequential remark or gesture is transformed and dominates the existence of the sufferers. It becomes the god upon whose altar they must humbly make sacrifice daily, hourly, perhaps every moment, in order to secure release from the demon of obsession. The relation of such compulsions to insanity is seen, first, in that they partake of schizoid nature; and second, in that, as in all schizoids of the dementia praecox type, they resist logic and reason. Compulsions,

like the delusions of the insane, may take up the entire waking life and lead the neurotic to the abandonment of everything else.

Compulsions may express themselves as suicidal or homicidal acts. This happens, however, but rarely, as in the following instance:

A man who had served in the World War developed a compulsion to turn on and attempt to kill anyone who walked behind him. He could never rid himself of this homicidal tendency, and upon several occasions nearly killed innocent people. It was learned that his neurosis had begun after a prisoner, whom he had been overseeing at some work in a prison camp, had attacked him from behind. Because of his attacks, he was kept under close observation, but all treatment failed, and he sank deeper and deeper into the mire of regression.

Compulsions sometimes take the form of blasphemy and lead to the defiling of places of worship or to doubts about God. The extreme is seen in devil worship: the Black Mass and the "Witches' Sabbath." Ceremonies of this nature feature the ridicule and the mockery of orthodox Christianity, the reaction being in a sense the same as the negativism of the insane: the patients are silent when you ask them to speak, and cry when you ask them to smile. At orgies of this type there is ample opportunity for the expression of that kind of compulsion based on sacrilegious obsessions and impulses. Thus the compulsion forces its slaves to worship Satan in place of God!

The compulsive neurotic indulges in a ritual which is the diametric opposite of his unconscious wish. He washes his hands constantly against his fear of contamination; he walks in a certain way, greets people in a particular manner, eats in a manner peculiar to himself. All have a symbolic meaning for his unconscious and are the defense against anxiety. Some may even risk social disgrace by compulsive

exhibitionism; they may flaunt the law by pyromania or kleptomania. Certainly, periodic drinking may often be a compulsion.

Such symptoms feature the compulsion neurosis and must be understood as: a denial of an unconscious wish; a defense mechanism against such cravings' breaking through; a symbol of revolt occasionally against paternal domination; and finally, a rite to obtain absolution of unconscious guilt—often of a sexual nature—and to keep the peace which would otherwise be destroyed by a morbid anxiety. Religion is, incidentally, the common outlet for compulsive acts that are socially approved.

#### **Obsessions**

Obsessions are "idées fixes" which generate compulsions. They are innocent ideas which are the conscious symbols of unconscious painful ones. They arise without reason and remain without right of logic. They bear no relation to reality, but are difficult to dissipate. They occur as the feature of an obsessional neurosis.

Obsessions are very common. A man is obsessed with the idea he will die at sea and wagers a large sum to that effect. Another is convinced that he will go to prison, although he has never broken any laws so far as he knows. Still another finds an evil meaning in every action of his own, no matter how generous and kind it seems. A woman is obsessed by the idea of jumping from high places and will not live, or visit anyone who lives, above the street floor.

## Neurasthenia

The neurasthenics complain a great deal about what is the matter with them; but, upon examination, they show little reason for their complaints. However, they usually suffer from abnormal fatigue and are easily irritated; they wake up tired in the morning, but improve as the day lengthens. They are depressed, are unable to concentrate upon anything except their own symptoms, and cannot make up their minds about the most simple matters.

The abdominal organs are the most frequent site of their complaints; there are frequent headaches, dizziness and heart complaints. Disordered sex function is associated and probably causal in this condition. The victim is often a chronic masturbator or is inadequate in his sex relations, although he may be exorbitant in his demands. There is often a vicious circle of increased appetite, lack of confidence in ability to secure normal function, and frequent frustrations. Their love life, either in or out of wedlock is, of course, unhappy.

Hugh Blanding was an artist, was thirty-five years of age, and had been married five years. He said: "I don't know what's the matter with me, doctor, but I feel tired all the time. I have a hard time falling asleep, but once I do my rest is unbroken. When I get up in the morning, I'm all tired out before I get started. Somehow or other nothing seems to interest me; I've had all kinds of jobs but never could stick to them. Many of them I quit because of a fear of getting fired. It just doesn't seem in me to make good at anything.

"Masturbate? Well, I guess I did, about as much as the average boy. But I couldn't seem to stop until I got married. It worried me a lot. I thought things would go better after marriage, and they did for a couple of months. But then the wife started nagging—I guess we didn't get along—sexually, I mean. Life isn't worthwhile living the way it is now. I get irritated so easily, feel depressed all the time, and just can't seem to get going. Sometimes I think I'd be better off dead. Not that I want to commit suicide—the thought of that makes me sick to my stomach.

"Well, that's the way it goes-always something wrong with me. Now it's my stomach or my bowels; tomorrow I may get a heart attack. I don't imagine these things. I've been to a lot of doctors, and none of them could find anything wrong. 'Just nerves,' they said. But I know there is something wrong somewhere. If you could only find out. I'd undergo an operation—anything to get well."

This recital is typical of the neurasthenic, of the despair of both doctor and patient. There is much smoke but no fire. They make up a good percentage of the cults and "isms" that feed on their credulity and pathetic longing to get well. Blanding, like other neurasthenics, has a definite sexual abnormality. A rearrangement of habit, and much psychotherapy, will help him.

# Hypochondria

Hypochondria is almost never seen alone, but rather occurs as a symptom in many neuroses. It consists of baseless complaints about disturbed function of the abdominal organs. The sufferer may insist that his bowels are paralyzed or that his sex glands are disordered. The complaints vary, and sometimes do progress to delusions; thus a common delusion of the insane person is that he has no stomach, no intestines, and no mouth. Like the neurasthenic, the hypochondriac occupies himself with discovering new symptoms and with canvassing healers, cults, and quacks for relief. He resents any attempt to prove that his complaints are psychic rather than physical. The symptoms persist for years and are nearly always associated with some degree of anxiety.

The worst case of hypochondria ever to come to the author's notice was the following:

A girl of fourteen complained of vague abdominal pains. Although there was no evidence of it, she insisted that her appendix was diseased, and begged to be operated on. The surgeon did so only with reluctance, and, sure enough, a normal appendix was found. The other abdominal organs were normal as well.

Six months later the patient returned and stated that she had had very fleeting relief after the operation and that, at present,

the abdominal pain was worse than ever. Again she begged to be operated on, saying life would become unbearable for her unless she obtained relief. No medicine seemed to improve her, but another operation was refused, because it was felt that the

patient was a hypochondriac.

Years later, I saw the patient again and learned that in the interval she had had some fourteen abdominal operations! She seemed to get relief from her symptoms for a month or two, but within six months, at the most, she would have herself operated upon. Examination at such times showed no physical signs of disease except possible internal adhesions, due to her operations.

# Hysteria

Hysteria is the most common of all the neuroses and is one of the most frequent that fetters mankind. Hysteria, like tuberculosis, is a great imitator; it can and does simulate many organic conditions. It may express itself in paralyses, anæsthesias, crises, fits, convulsive seizures, "shakes," somnambulism, and other forms, too numerous to detail. It may occur in entire groups as well as in individuals. Communities confronted with crises—national, as in war; or local, as in a "Jack-the-Ripper" type of murder—show symptoms of a mass hysteria.

The word hysteria comes from the Greek and means womb. The ancients thought that nervous disorders were due to the wanderings of the uterus about the body, avoiding unpleasant odors and being attracted to pleasant ones. Its ramblings caused it to make pressure on certain organs or to choke up certain passages, this giving rise to symptoms called hysteria. Even at that stage of human knowledge, the relation of psychic disturbances to deviations of the sex impulse was clearly indicated. Plato recognized, although he deplored, the universal dominance of Aphrodite.

Hysterics are very susceptible to suggestion, and all sorts of symptoms are induced by unwise handling of these people, either by their family or by their physicians. Even the great Charcot had a distorted picture of the disease because he misunderstood the nature of the individuals with whom he was dealing. He would talk freely to students in front of his patients, and the latter were always willing to accommodate him by going into a grande crise, or a fit, or by developing a loss of sensation in an arm or leg. Your hysteric, like Barkis, is always willing and aims to please.

Hysteria, like the other neuroses, is caused by the repression of a painful or tabooed idea. Very often this disturber of the unconscious is transformed into physical manifestations, such as loss of voice, paralysis of a limb, or disturbance in power of sensation. This type is called *conversion* hysteria, and its symptoms represent conscious substitutes for unconscious frustrated desires and are the infantile attempts of the hysteric to adjust himself to reality.

Hysteria is seen most at puberty and in early adult life, but it is not infrequent in children; the roots of the trouble lie, as usual, in some conflict in childhood. Essentially, it must be considered a fugue, a flight from reality into dis-Sometimes this takes the form of a real fugue, as when an individual suddenly leaves his usual haunts, disappears for weeks or months, during which time he behaves like a normal person although he behaves so that no one suspects him for anyone else but the person he claims to be. Sooner or later, the fugue ends, and the victim awakes and returns to his original identity. Indeed, many cases of so-called multiple or dual personality must be considered as fugues. Everyone has traits that are manifest and others that are latent. In this splitting-off, or personality dissociation, which we call a fugue, a latent personality is realized and becomes manifest. The fugue may end as suddenly as it began, and the victim awakes as if from a

dream to assume his usual personality. People who are described by the press as sufferers from aphasia, or more properly, amnesia, are undergoing this kind of hysteric reaction.

The hysteric is oversensitive, quick to take offense, "blows hot and cold," and lacks emotional control. He may have spells of crying or laughter, and he always wants the spotlight. In fact, lack of attention often precipitates conversion symptoms, whose function is not only to protect the hysteric but also to draw the interest of others to him. Hysterics are always acting, and their poses represent an infantile reaction to their environment. They combine love and hate without great capacity for either; they judge everything in terms of themselves. Sexually, they are immature, the male being inadequate or impotent, and the female frigid, anæsthetic, or avowing a disgust by "Oh, that sex business! Why can't you see that it is a habit, and a filthy one? Ugh!" Life to them is a day-dream, and they secure from the fantasy what they cannot possess in reality.

Sometimes anxiety appears, and the type is known as anxiety hysteria. The outstanding traits of the sufferers are their abnormal suggestibility and their tendency to "fly into disease" by the appearance of conversion symptoms, mental or physical.

Pain is the most common conversion and is usually of the neuralgic type. It appears anywhere in the body, and the hysteric describes it as "awful," although he does not seem to suffer as much as his emphasis suggests. Headache, in particular, is common, usually consisting of a very sensitive scalp and lasting days and weeks. Pain may be accompanied by various disturbances in sensation in the limbs; the sufferers complain of "crawling," "tingling," and "burning," although there are no external stimuli.

Often they can stand the stab of a pin or a needle and show no outward evidence of pain.

It should always be borne in mind, however, that organic disease may sometimes be obscure and so be mistaken for hysteria. All pains must be traced, and a physical basis must be sought for. Hysteria is sometimes the ash heap upon which we cast our ignorance.

Annette Glauber, a young Viennese girl, was a maid-servant. She had vomited almost daily for six months and had lost much weight as a result. She had alternate fits of crying and laughter, was elated and depressed by turns, and said that she had pains and aches all over her body. She worried most about the vomiting, which she thought was due to some stomach disease.

Careful examination disclosed, aside from the loss of flesh—due to her inability to retain food—no physical evidence of disease. Nor did X-Rays show any disease of the stomach and intestines. However, further searching brought out the fact that the vomiting ceased as soon as her menstrual period began, and that it recurred two days after the latter was over.

Annette admitted that she was living with but was not married to a young countryman of hers, hurriedly explaining that they intended to marry as soon as they had saved a certain sum of money. So, it now became clear, the vomiting was a conversion symptom occurring in a hysteric: Annette was possessed of a sense of guilt at her sex life out of wedlock; she admitted a fear of pregnancy and of the disgrace that would follow. Her condition was accounted for as follows: The beginning of the menstrual flow assured her that she was safe, and thus there was no need to express her fear in vomiting, which symptom very probably had a protective function in that it would weaken the body and so tend to induce spontaneous abortion. But as soon as the period was over, the fear would return and again express itself in vomiting.

All this was explained to Annette. She returned several months later and told the author that she had married, and that the vomiting had stopped and never recurred.

Hysteric paralysis is the "glove" or "stocking" type, which covers parts of a limb, comes on suddenly after sug-

gestion, or follows some emotional shock. Sufferers from it are usually the subjects of the miracles of "faith healing." They are probably the lame and the halt and the blind who were cured by the "laying on of hands."

During the war numerous examples of hysteric paralysis were seen. Men who were drafted sometimes developed overnight a numbness and loss of power in an arm or leg. This condition would continue until the Armistice was signed, and usually cleared up shortly afterwards. Other men, willing enough to fight, came out from under fire with similar paralysis. Examination in all these cases showed no evidence of injury to the muscles or nerves. The reaction was brought out in hysterics by the fear which stimulated the instinct of self-preservation. The paralysis offered a certain escape from the threatened danger.

Evelyn Donner complained that she had lost her voice. At intervals she would suddenly become hoarse and would be unable to speak for several days. She complained also of dizziness and fainting, and was possessed of the fear of going insane. Her attacks would appear and disappear abruptly, every few months.

Evelyn was having voice training and was expecting to do concert work. She said that the loss of her voice always took place a few hours before an audition with a famous concert manager.

Now an examination showed nothing wrong with her larynx—no organic reason for this loss of her voice. However, it was learned from the patient that she dreaded the ordeal of the voice test and the possible criticism of the impressario; she was beset by a fear that she would not "make the grade." Hence, it was concluded that a defense mechanism lay at the root of her trouble: her attacks of hoarseness postponed the decision about her voice, thereby leaving open the possibility that she would some day make good.

The hysterics' fits, the grandes crises of Charcot, are very rare and superficially resemble epileptic seizures, although they do not feature the tongue-biting, the frothing at the mouth, and the loss of control of bowels and bladder that go with epilepsy.

Tony Wells was a rather effeminate young man of twenty. He had frequent attacks of faintness and dizziness, and he feared insanity. He was unable to interest himself in women. His parents were divorced and he supported his mother, to whom he was very devoted.

For some six months he had had attacks, during which he fell suddenly to the ground without injuring himself. He would become rigid, with head thrown back and hands clenched. Then he would turn and begin jerky, spasmodic, convulsive movements, which were accompanied by sighs and—later—by cries of pleasure. The attacks would end in a gradual cessation of the movements, and Tony would remain in a daze for a few minutes before coming to himself. He had apparently no warning before the attacks came and had no knowledge of what transpired during them. His mother, who had witnessed several of these attacks, insisted that they simulated the sexual act.

Persistent prodding into the past finally revealed that Tony, while walking in the park, had come upon a couple flagrante delicto and had been much upset. He had considered sex "a dirty business" and seemed much depressed after this incident. The attacks had begun a week later.

In this instance, an emotional upset produced a dissociation, or splitting, of Tony's personality. In the attacks, Tony relived the memory which he thought he had forgotten but merely had repressed; it was unpleasant to his conscious but not to his unconscious. Reëducation began, and the author made a strong effort to show Tony the place of sex in life as the expression of normal human beings. He soon understood that he should not repress, but rather recollect, the episode for what it was and nothing more. Thus was brought about a complete cessation of the "fits."

## Somnambulism

James Watts suffered from "shakes" and twitched as if he had St. Vitus' Dance. He complained of pains and aches, for which doctors could find no cause, and he was told "it is all mental; forget it and you will be well."

But James could not forget it, and soon he developed fainting attacks and began to lose interest in things. One day he left his house to go to work, but he did not return home for three days. His employer told his parents that he had not come to the office on the morning he left home. When James returned, he said that he had "come to" in a small town some distance from his home. What had happened and where he had been for three days, he could not tell.

Shortly after this he began to walk and talk in his sleep. This would sometimes last for hours, and his mother watched him carefully during these nocturnal episodes, for fear he would hurt himself. She informed me that James seemed wide awake and that all his actions seemed purposive. His talk concerned his wife, who had died a few weeks before the symptoms began and for whom James grieved, although he tried not to show it. James himself had no knowledge of his nocturnal personality and was incredulous when told about his sleep-walking stunts. Indeed, one night, when his mother relaxed her vigilance, he walked through an open window and broke both of his legs, but even then he could not explain what had led to the misfortune.

It is clear from the sleep-walking that James had suffered a dissociation that lasted for short intervals. During this time, he exhibited the automatic action so common in hysterics, even having the three-day fugue. His somnambulism, notably, was a successful device for reliving moments of happiness with his wife. If his primary, or waking, personality could not enjoy makebelieve or fantasy in which he could talk to his dead wife, then his secondary personality would do so in a somnambulistic state.

Tom Jones, a young man of twenty-one, had had as a child fits of uncontrollable tears and laughter, had suffered from headaches, and had walked in his sleep. Later he had showed memory lapses and a morbid fear of death.

During the war, he was "shell-shocked," although not physically injured. At the base hospital, he began to walk in his sleep. He was observed, and it was found that his actions were always the same. He would dress and walk out of his ward and down the stairs to the commanding officer's room. There he would stand at attention, mumble a few words, wheel, and go back to bed.

Tom was reliving the incident that had brought on his "shell shock." He and his comrades had repelled a raid on their trench, and all but himself had been killed or wounded; thus, in the somnambulistic state, as in life, he had to report to his superior the results of the affair with the enemy. As may be noted from the boyhood history, he was a hysteric personality. The war hastened an inevitable breakdown.

Another young soldier went through several engagements and then began to have "fits." These would sometimes come on during sleep as well as when he was awake. They began suddenly. He would fall to the ground rigid, with fists clenched. Then he would begin to squirm and jerk, and finally would stand up and dance and yell and curse. Often he would hurl threats at an imaginary enemy. Then he would squat, sight an invisible machine gun, and pump bullets at the supposedly onrushing Boches. He would work himself up to a pitch until he purpled with excitement. Gradually the seizure would wear off, and he would relax into quiet sleep. Awaking, he would have no knowledge of what had happened.

The above are some examples of how a hysteric can, by automatic action in a somnambulistic episode, find relief from his psychic tension, in reëxperiencing a painful and unpleasant memory that has been buried but not forgotten.

Millard Winston was a lieutenant in the American army in France. He was ordered by his captain to division headquarters with an important message, and he set off on motorcycle. But he never reached his destination, and after a few days he was reported A.W.O.L. Several months later, a man answering his description was found working as an ambulance driver. He gave his name as Jerome Travers and rendered a coherent account of his past life. But the resemblance to the missing officer was so strong that he was held for court-martial.

His captain arrived and identified him. After a few minutes of talk, the prisoner "came to," as he described it. He suddenly remembered who he was and all the facts of his past life as contained in the army records. But he could not remember any incidents of the weeks during which he had been living a new life under a different personality.

The normalcy of his actions before he was identified left some of the hard-boiled army officers unpersuaded that he was not malingering, and they were all for court-martialing him. But an investigation of Millard's boyhood through a questioning of a lifelong friend who was in the same company, soon showed the truth. Millard was known to have "spells" of rage, laughter, and tears which he could not control. At the age of eight, he had thrown a heavy vase at his mother for some trivial reproach. Later, he had suffered memory lapses. On two occasions, when he was fifteen, he had been away from home for several days and on his return had been unable to tell where he had been and what had happened to him.

Hence it became evident that Millard was a hysteric. His experience had represented a fugue. A hospital, not a court-

martial, was what he deserved.

In cases such as the above, to look for a cure is expecting a great deal. Where the individual's adult difficulties are the result of bad habit formation in childhood, it is difficult and often impossible to eradicate them by any form of treatment.

# Dual Personality

The dual personality may be considered as a prolonged fugue in a hysteric. Such an individual shows a complete splitting of the personality and a change in character. The two selves have no knowledge of each other. Psychoanalysis considers this as a form of regression, or a shifting back to an unconscious fantasy.

Edith Evans, a girl of eighteen, seemed to be normal. She was pretty and well-liked in her home town. But at nineteen she had an unhappy love affair, due to parental interference, and following this she seemed to change in character. She became morose and had fits of temper, during which she was liable to become violent, although usually the irritant was a trifle. She began to complain of headaches and a loss of memory, which lasted for hours, and even days. Later she began to walk in her sleep.

At this time she married, but although she admitted her husband "was kindness itself; if only he wasn't obsessed by the necessity of sex," she was unhappy. She disappeared from home one morning after she had set out for a shopping tour. Efforts to find her failed, although the aid of the police was enlisted. Six months later, a private detective found a woman answering her description working as a maid in a town several hundred miles away. She denied her identity, and so rational was her explanation that the detective began to doubt whether he had found the right woman. But the sight of the husband, who came in response to a telegram, served to restore the primary personality, and she "remembered" who she really was.

It was ascertained that in her secondary personality she was a cheerful, conscientious, and well-liked servant who seemed normal in all respects. However, her recovery brought back the depressed, dissatisfied, and easily irritated personality she had been before her disappearance. She refused to coöperate and remained inaccessible to all attempts at treatment. She seemed, like many of her kind, afraid that she might get well.

# Traumatic Hysteria

Traumatic hysteria is the reaction which begins after an injury, usually to the head. The main symptoms are headache and dizziness, which follow immediately. Sometimes the victim may feel well for weeks following the injury, and then develop symptoms (this is not always due to a desire to recover monetary damages from some corporation!). The phenomenon was seen during the war in many soldiers who had suffered from concussion of the brain, and in peace times it is seen in victims of railroad accidents and industrial injuries.

Dolores Lopez was a Spaniard of forty-two. She was struck on the side of the head by a piece of lumber as she alighted from a train, and was unconscious for a few minutes and dazed for several hours. She developed headache and dizziness, which occurred almost daily. She became depressed, could not sleep, and started at any slight noise. She jumped if the doorbell rang or if her six-year-old daughter raised her voice. And a week after the accident she developed a numbness in her right arm and found she could move it only with great difficulty.

The railroad attempted to secure a release by offering her a sum of money, but upon the advice of her lawyer she refused it.

Examination by the company's physician and by me disclosed only a low blood pressure and active reflexes—indications of increased nervous irritability. The company doctor smiled and insisted that Mrs. Lopez was malingering with the hope of securing a large settlement. However, I determined to withhold my judgment until I had observed her for a longer period of time.

The case did not come to trial for three years, and during that time I watched the progress of the disturbance which had set in following the accident. Despite electrical treatment, the arm became practically useless, and Mrs. Lopez had to abandon the millinery trade through which she helped her husband eke out a living for themselves and their daughter. She began to complain also of pains and aches in various parts of the body, and of nightmares. She developed a fear of death so strong that she put off going to bed as long as possible—she was obsessed with the thought that her end would come while she was asleep.

She finally received a settlement of a few thousand dollars from the railroad. Several years have elapsed, but she has grown steadily worse; she refuses to coöperate and consults a physician only when the pleas of her husband become too strong for her to resist.

In Mrs. Lopez, a predisposed hysteric personality—her early history indicated it—was released by the injury to the head. Her neurosis was a "way out." In her unconscious she resented the monotony of her life; she was a worker by day and a housewife by night. By her illness she could secure release and still gain enough money to compensate for her idleness.

Cases of this sort often develop without a desire of the patient for such compensation. It should be noted that, through her "flight into disease," Mrs. Lopez secured the solicitude of a husband who had begun to take her for

granted. Now he hovered over her and cared for her as if she were a child. She had but to express a whim, and he would try to satisfy it. Life became as pleasant and as free from care as when she was a child, clinging to her mother's hand and obtaining her heart's desire.

The accident solved her problem—as it does for many who suffer traumatic neuroses—and her unconscious grasped it and used it. She did not want to get well. She *knew* when she was well off. And no doctor can cure a patient who in her unconscious does not want to get well. That is why her type, like office-holders, never "resign." They die first.

#### CHAPTER XII

# The Criminal Personality

# Early and Modern Views of Crime

CRIME may be defined as anti-social conduct; the criminal as one who fails to submit his instinctive drives to the demands of reality or who does not make a social adjustment. In the eyes of the law, the basis of criminal behavior lies in responsibility; and upon this depends whether an individual may be punished or not. This concept was evolved centuries ago, when all breaches were considered offenses against God or the gods and had to be atoned for by sacrifice or penance. Even inanimate objects were held liable, such as the stone that tripped a man. Until very recently animals were held responsible for breaking certain laws and were punished by death. The ancients—and even the moderns—sidestepped by setting forth the doctrine of "free will" and holding all but the insane liable for anti-social conduct. But modern psychiatry has humanized retributive justice by pointing out that in many cases social behavior is beyond individual control; that there are personalities, criminal through no fault of their own, who are pursued by a destiny before which they are powerless. These are, in truth, "ill," quite as much as those suffering with pneumonia or tuberculosis or insanity; and to punish them savors of barbarity. Yet many courts of so-called justice refuse to recognize the soundness of such views because they conflict with precedent—too often a synonym for established prejudice.

Lombroso was the first to raise doubts as to individual responsibility and the justice of punishment, by describing a criminal type who were born, not made. Such people, he said, could be recognized by such stigmata as cranial and bodily deformities. Where men before him had been content with saying that criminals were often warped and misshapen and were the offspring of thieves, Lombroso attempted to measure physical traits—such as a receding forehead—that would distinguish the criminal before he became a wrongdoer.

At first he insisted that criminality was hereditary and that all crime was due to congenital flaws. But later, he modified his views and admitted that only forty per cent of criminals were organically predisposed to criminality; to account for the transgressions of the remaining sixty per cent, he suggested that there were life situations that caused a normal individual to yield to temptation. He was one of the first to recognize that such personalities were often found in cultured men and that many adult offenders had been model children. From this fact he deduced that such individuals were the victims of inherited defects which caused them to commit crimes whether they wanted to or not. His conclusions were that criminal traits were due to heredity, climate, and race; that such men were "throwbacks" who were half-way between the insane and the savage.

The physical traits of the criminal personality, according to Lombroso, were: a misshapen or asymmetric, low-browed cranium; a sparse beard and long jaws; and animal-like teeth and an insensitivity to pain. These five traits indicated the full-blown specimen; less than three showed a non-criminal.

Dr. Goring, an English physician, refuted this theory by a study in which he showed that the traits occurred as often in men of proved respectability; indeed, he found no correlation whatsoever between low brows and lack of intelligence, and criminality. This rebuttal led to a discarding of the theory of the physical basis of criminality. Lombroso was laughed out of court. So the impression gained ground that an offender—according to Lombroso must be beetle-browed, brutal, and with the marks of the beast upon him; and since there have always been "Gentleman Harrys" and the "baby face" bandits, no one will believe such a theory. That Lombroso had said only forty per cent could be told by physical traits, did not make any difference. The world did not heed his protests, and to this day, unthinking people smile in derision at the mention of his name. However, criminology owes a real debt to Lombroso, for he was the first to insist that there are delinquent personalities.

#### **Endocrine Criminals**

Since Lombroso's time, we have learned that organic changes, either hereditary or acquired, yield certain characteristics that may be said to distinguish certain delinquent types; and that prominent among such changes are those caused by over- or under-activity of the glands. Even a casual observation of prisoners will show that a certain number show physical traits that are based on endocrine disturbances. And evidence is not lacking to show that the same chemical imbalance is often the cause of anti-social conduct. We cannot claim that all offenders are victims of endocrine disorders, but we may be sure that a certain percentage are. The author's experience as a prison physician has convinced him that we can isolate the "borderline" types who are usually neglected in the shuffle. They need treatment—not punishment.

Thyroid inactivity in youth may give rise to infantilism—to a species of "grown-up babies," who may and do commit almost any sort of offense because they lack inhibition and have no sense of social responsibility. More important, however, are the hyperthyroid—the lean, "live-wire"—types, who have well-chiseled features and curly hair, large bright eyes, and are impulsive and explosive. They are restless, and are always "up and doing." Emotionally, they are unstable—especially when they have a persistent thymus—and are given to outbreaks of rage, often committing crimes of passion. A study of delinquent girls showed that as high as ninety per cent of them had a hyperthyroid constitution.

Excess thyroid activity gives the individual unlimited energy and an intelligence that makes him a difficult criminal to deal with. Once recognized, his condition may be relieved by rest, sedatives, X-Ray treatment, or the removal of a part of the gland.

Persistence of activity of the thymus gland, instead of atrophy after ten years of age, brings on the status lymphaticus condition. One of the results is an arrest of sexual development—in effect, a partial castration. Such individuals are predisposed to homosexuality and other types of degenerate conduct, and as such they constitute a portion of our prison population. A study of twenty-two murderers in West Virginia showed that seventeen had enlarged thymus glands. Physically inferior, and lacking control and moral responsibility, the thymic sufferers are the misunderstood and the misfits of the group. They swell the ranks of the drug addicts and the "killers" among gang-Frequently, they find in suicide an escape from an unfriendly world. In fact, a recent study of suicides disclosed a large number who had a persistent thymus gland.

Eddie Baker, as a child, was a bed-wetter and a liar, and he frequently stole from his mother's purse. Other people could never believe the stories Mrs. Baker told about Eddie's delinquencies because he looked so innocent.

At sixteen, Eddie was sent to a reformatory because of burglary with a gun. The prison guards called him "Angel Face" until he attacked one of them in a fit of rage and beat him nearly to death.

Released at eighteen, Eddie became a narcotic addict and the "punk" of a notorious gang. Not long after, upon the insistence of his leader he shot down a rival gangster in broad daylight, and was captured by the police after a running gun battle. At the trial he showed no emotion, even when sentenced to death. And at the last he sat down in the "chair" with the nonchalance of a man getting shaved, urging the warden to "get it over with." An autopsy revealed a large thymus gland, and the body showed typical thymic stigmata.

The tragedy of people like Eddie Baker lies in the fact that such personality disorders are largely preventable if suspected and treated. Had Mrs. Baker sought out a competent physician, an X-Ray picture would have revealed the enlargement of the thymus gland. It would then have been simple, as a remedial measure, to cause it to shrivel by X-Rays. This would have prevented the thymic domination and averted the abnormal tendencies to which the boy yielded. The conclusion cannot be avoided that the thymic individual is a proof that there are *criminal personalities*.

The defects of the adrenal gland are reflected in definite incidence in drug addicts. Insufficient and inadequate, such people seek compensation for their inferiority in drugs, which give them at least a transient sense of power and superiority over the rest of the world. Victims of this endocrine imbalance sometimes become "neurasthenic" criminals, graduating from their status as "problem" children to the adult stage of lawbreakers.

Adrenal excess endows individuals with well-toned muscles and unusual strength, making for pugnacity. It is from among these people that the perpetrators of crimes of violence come. They carry aggressiveness to its logical extreme, and as a result of their "chip-on-my-shoulder" attitude, they are frequently arrested for assault. When suffering also from sex gland dominance, they commit sexual offenses such as rape. The future will undoubtedly provide adequate treatment to cure these anti-social characters.

Abnormal behavior is seen among individuals suffering from insufficient action of the *pituitary* gland, due either to a bony box which stops normal growth or to a degeneration of the organ itself. Such individuals suffer from Froelich's disease, showing marked obesity, rudimentary sex development, dullness, and easy irritability. They lack moral inhibitions, suffer from obsessions and compulsions, are pathological liars, and do not become socially conscious like normal children. The courts see them as juvenile delinquents and incorrigibles. They often develop wanderlust and join the hobo army as children. They also steal without any consciousness of having done wrong.

The gross cases are easily recognized by their physical and mental traits; nor will the borderline types elude the endocrine expert. Their cure is often simple. By feeding them extract of pituitary gland regularly, we can greatly reduce the number of delinquents from which the habitual criminal army recruits its new members.

# Heredity and the Criminal

Feeblemindedness is manifested in varying degrees among criminals. A study by eight leading mental examiners places the percentages of feebleminded among criminals between ten and seventy per cent, the variations in this estimate being explained by variations in the methods used by the examiners; the author, judging from his own experience as a prison physician, is inclined to estimate the number at about twenty per cent. It has been observed that feeblemindedness is inherited in about two-thirds of the cases and acquired in the remaining third. It is a recessive trait and is transmitted according to the Mendelian principle; that is, it appears—as we learned in our study of genetics—as a consequence of the combination of two defective genes.

Mental defectives—especially those who are not hereditarily deficient—often lack physical stigmata and can be recognized only through intelligence tests. However, most mental defectives have recognizable physical stigmata. Stigmata that are of hereditary origin are seen in: cretins, who have dull eyes, thick skins, pot-bellies, and badly formed skeletons; microcephalics, who have undersized heads; macrocephalics, who have oversized heads; mongols, slant-eved children with mixed gland disorders; hydrocephalics, who suffer from an increase of fluid in the brain ventricles and have a large head; and congenital syphilities, infants of this type looking old and wrinkled, and adults showing such stigmata as the semilunar notching of the upper central incisors, or Hutchinson teeth. There are also a variety of conditions that cause a failure of the brain to develop, including Little's disease—a paralysis of the legs and intellectual retardation. After birth, mental deficiency is often seen as an aftermath of encephalitis, or so-called sleeping sickness, which produces a mental arrest in what had been a normal child.

The feebleminded are classified as: morons, imbeciles, and idiots. Morons have a mental age of from eight to twelve years, and they never develop any higher intelligence. Unless the environment is favorable, these individuals make

a poor adjustment. In gangs, they are the "punks" or the "goats" used by the smart leader to accomplish dangerous tasks. Because of their stupidity, these catspaws are more easily caught than more intelligent criminals. The following case is illustrative of how they may be misused:

Some years ago a slight, excited young man pushed through a cordon of police and under their eyes shot and killed the notorious "Kid Dropper," who had just been acquitted of some crime. The slayer, overstimulated by cocaine, made no attempt to run away, but grinned foolishly as the detectives took him into custody. A typical gang "punk," he "took the rap" without betraying his leader, whom the police knew to be guilty but whose guilt they could not prove. The slayer had no personal motive for the killing; in fact, the underworld gossip insisted that he had been filled with dope, a gun had been put into his hand, and he had been told to "get rid of the 'Dropper'." He was convicted and sentenced to twenty years. He showed no emotion except to confide to friends that "now the gang" would know he "had the guts to give a guy the works." In his enfeebled mind, he was happy because he had made good!

If the moron is recognized as such, and is given a job within his limits, he may be of value to society.

The average *imbecile* has a mental age of from three to seven years. He must and should be kept in a home, since he is irresponsible and cannot care for himself. *Idiots* have gross brain defects and are under three years of age mentally. Like imbeciles, they must be cared for in special institutions. Under ideal conditions, in places such as Letchworth Village, imbeciles and idiots are trained by special workers and sometimes make surprising progress. Among their own kind, these unfortunates find a measure of happiness.

Mental defectives may or may not become offenders; but they are the pre-criminal personalities. Those who are not protected from an environment in which evil influences work on their suggestible mind sooner or later become chronic transgressors. Only a good environment will shield these unfortunates and save them from themselves.

The crimes of the feebleminded are usually crimes of revolting violence.

Tom Smith, a half-witted grocer's boy, was rejected as a suitor by his employer's daughter. One night he entered the grocer's bedroom and stabbed the husband and wife to death. He said that he did this because he hoped to win the girl once the parents were "out of the way."

Individuals of this stamp brook no barrier to their primitive urges. They cannot judge the quality of their acts and do not discriminate between social and anti-social conduct. Their own criterion of what is good or bad, lies in what appears to their immediate benefit; like the child and the unconscious mind, in their behavior they manifest the crudest workings of the pleasure-pain principle. They also lack inhibitions and have poor emotional control, the latter being evident especially among children who become deficient as a result of encephalitis. This disease hits the basal ganglia of the brain, by which our emotional life is controlled. When he has this disease, a child, once placid and easy-going, flies into a rage with slight provocation, becomes destructive, and may threaten—or sometimes even kill—the unwitting person who initiated his anger.

In general, the crimes of the feebleminded are sexual and degenerate. The feebleminded are the mass murderers like Haarman of Hanover, who killed twenty-seven people only to satisfy a sadistic lust; the "Düsseldorf Vampire," who slew more than thirty young victims; and—in our own land—Powers, the "Virginia Bluebeard," to whom also many brutal murders are attributed.

Feeblemindedness is vastly on the increase despite such movements as eugenics, and the borderline defectives, to whom the environment is unkind, continue to crowd our prisons. Recognition of the sickness of this pre-criminal type must take place, and courts should be guided not by their acts and by the punishment they seem to merit, but by their mental states and by what treatment they need.

## Environment and Criminality

The foregoing paragraphs having considered the criminal character as organically conditioned, we shall now examine the causes of anti-social conduct that are present in the environment. Environment-made criminals, who are far more numerous than organic criminals, usually have few—or no—physical disorders to account for their unlawful acts.

Environmentalists regard crime as a failure to make a social adjustment, as a refusal to submit instinctive desires to the demands of reality. From this point of view, everyone at birth is a criminal; the infant is a mass of unbridled drives seeking satisfaction without regard for any codes or laws. Infancy is anterior to conceptions of right or wrong, to systems of ethics and to Mosaic morality. In order to obtain the goods of society—the love of his parents, the approval of the group, recognition, position, prestige—it is necessary for the child to deny his natural criminal or asocial desires. These, as we know, often persist in his fantasies and dreams and in his unconscious mind. Their overshadowing shows that the process of socialization or successful adjustment has been made.

Such is the customary progression of the average child to the state of a law-abiding citizen. However, the average child faces two dangers that are beyond his control: first, he may be oriented in a thoroughly bad environment, learning successfully but wrongly; second, even in a good environment he may meet situations that bring on certain kinds of mental illness.

Criminals who are the product of the first-named environment are those who have been raised in the city slums, rooming house areas, "red light" districts, and the like, where the community mores glorify the racketeer, the bootlegger, and the crook who is too smart for the police—where the group is swayed by the principle that "the only sin lies in being caught." Children who grow up in these gang-infested and criminal-dominated areas, see crime condoned or defended as the privilege of the oppressed to wring a living from a despotic world. Where parents encourage their children to steal coal and junk from railroad yards because the railroads are "soulless" corporations who have fattened upon the poor; where the neighborhood hides and protects known criminals from the law; where the police are objects of hatred—there the child takes to gangs and crime as a form of proper behavior, just as the children of happier groups learn an antithetical way of living.

In short, the children of the underworld do not fail to adjust; rather, they are socialized successfully but to the wrong community. They have no inner conflicts or doubts about stealing, lying, delinquency and later major crimes. They fear punishment and plan their offenses with an eye chiefly to avoid detection and capture. To laws of their own world they submit: they do not "squeal," they have their loyalties and codes of behavior, and they hate "cops." They do what they have learned to do.

However, studies by Glueck at Sing Sing have shown that only some twenty-two per cent of the prison population are totally free of all mental disorder. The remaining seventyeight per cent include all from the dull-witted to the epileptic and the psychopathic personalities. Estimates of what proportion of offenders are actually mentally ill vary in many studies. But all examiners agree that a considerable percentage of lawbreakers suffer from various nervous disorders.

The compulsive neurotic is a familiar type of criminal. He is seen as the pyromaniac, or "firebug," who takes an insane delight in setting buildings on fire and chuckling as he watches them crumple in the heat of the flames. There are also the kleptomaniac, who steals trifles without needing them, because of an inner compulsion; the pathological liar, who tells tall tales "for no good reason"; and the epileptic, whose seizures assume the form of criminal conduct (the so-called "epileptic equivalent") and who often commits crimes of violence; and the many psychopathic personalities, whose emotional instability and lack of inhibitions get them into difficulties with the law, and who are common among the recidivists—the "repeaters," or "record" men. Add to this group the psycho-neurotics and the neurotics, and you will have a panorama of what a polyglot criminal population peoples this neurotic country. The roots of their troubles, one and all, lie in a variety of conflicts. There is an unequal struggle between their instinctual (natural, and often criminal) desires and the demands of the group, which requires the satisfaction of certain standards.

The cause of this conflict is always found in an unsatisfactory environment, or "broken" homes, unhappy marriages, divorced parents, frustrations in love and in business, parent fixations, homosexual tendencies, feelings of inferiority, and other factors too numerous to mention. From such a struggle some personalities retreat into the shelter of a neurosis and punish themselves; others—the neurotic criminals—attack and inflict injury upon society by anti-social conduct. Freud believes—and we have seen in the cases of obsessions and compulsions many instances

which seem to bear him out—that these people suffer from an unconscious sense of guilt. They perpetrate unlawful acts with the unconscious hope of detection, punishment, and consequent atonement for their secret sin; merely to entertain a tabooed desire such as for incest or a friend's death, is sufficient to develop a sense of unconscious guilt. The author's contention is not that such conflicts necessarily cause crime; it is that, as in the case of the organically diseased minds, certain personalities tend to get into difficulty with the law when the environment increases its pressure and makes the conflict unbearable. Under favorable circumstances and adequate protection from the wounds of life, such characters make some sort of a compromise and retain at least the outward appearance of social adjustment.

#### Crime and the Future

All theories of punishment are based upon individual responsibility for criminal behavior. But criminals are men who are driven to a disapproved conduct through forces beyond their control. To punish them is psychologically stupid, since they are incapable of benefiting by it, as is proven by their becoming recidivists. Punishment can deter only the twenty-two per cent described as the normal or non-neurotic criminals—those who have become adjusted to the mores and folkways of another world. Hence, at least a majority of the prison world must be considered as sick men and women. They should be studied and treated, like a man who contracts pneumonia or malaria, and is told after his recovery—as the paroled prisoner is told in effect—to "go and get sick no more."

Special pleading for the sick personalities who are classed as criminals when they are ill in body and mind, is nothing new. Crime commissions, bar associations, and psychiatrists have proven in many surveys the injustice of lumping all offenders together and sentencing them as if all their acts were the result of vicious wills. But despite all agitation, less than ten per cent of the courts in the United States have full- or even part-time psychiatrists affiliated with them. Courts and judges and law still prefer precedent to yielding to the clamor of science that justice be done to the sick in character who are made to bear a double burden through the ignorance of men and through legal resistance to changing conceptions.

Only through an understanding of what converts potential criminals into actual criminals, can society decrease the hordes which threaten to lay it waste; only through treatment of these unfortunates can the community prevent relapse and recidivism. The problem of the delinquent and the adult offender does indeed loom large in the future of our culture. There must be established preventive programs, such as that of sterilization and isolation of the feebleminded; recognition and treatment of juvenile delinquents; psychiatric examination of every adult offender and recommendations for his cure, rather than the imposition of a fixed sentence for specific offenses without regard to his mental condition. Unless society reorganizes its theories of crime and punishment, brings its courts in line with the discoveries of science, looks to reform and cure rather than to revenge and retribution, our civilization may yet find itself engulfed by a tidal wave of crime.

### CHAPTER XIII

# The Psychoses: Personalities in Flight

Ancient and Medieval Views of the Psychoses

UR travels through the land of the neurotics bring us at last to the borders of another domain. We stand before gates grim and silent as the grave. A chill comes over us as we pass through and hear strange noises—weird laughter and wailing of lost souls, which is the language of the land. Irresolute, we hesitate. But it is too late; for in this country there is no turning back. Did you not read the sign above the gates?

Abandon hope all ye who enter here.

To this land many paths lead. A few of its inhabitants retrace their steps and stumble back into reason and happiness; but for the majority, there is but one way out—true death. For this place is peopled by the insane, the falsely dead.

Concepts as to the origin and the treatment of the insane have changed remarkably during the last two thousand years. Indeed, one could very well trace the progress of human thought and the evolution of social states during this period by their attitudes towards the insane. During long ages, from the beginnings of the race, such progress was painfully slow, and to us, disheartening. The genesis of the understanding that has recently dawned was laid only in late antiquity.

Primitive man found himself alone and helpless in a drear and forbidding universe. Everywhere the hand of Nature was raised against him. He sought shelter for his body and food for his stomach. But the heavens thundered, and the beasts of the forest roared. So he crouched in fear and clothed the darkness that invested him, with strange powers. Sticks and stones and trees became living things, containing an imprisoned spirit or personality. Small wonder, then, that he should have thought of the babblings and ravings of the insane as mysterious messages from angry gods. As he worshipped inanimate objects as charm-bearing, so did he worship the insane as holy. Even when animism gave way to civilization, ancient man still saw the insane as the mouth-pieces of the gods. They regarded with awe the epileptic who fell in the public square and with frothing mouth spoke "with tongues." The insane became a class apart, revered and treated with all the deference due to the gods themselves.

As for so much else, we must go back to the Greeks for the initial attempt to throw the light of reason into the dark corners piled high with the rubbish of human knowledge and ignorance. Hippocrates, who has come to our attention in earlier pages as the "Father of Medicine," was the first to abandon the ancient conception of insanity as the "sacred disease." Epilepsy, he said, was no more sacred or divine than other diseases; ignorance and wonder alone make it divine. He first taught that the brain was the seat of a disease which caused madness. He observed that injuries to one side of the head were sometimes followed by convulsions on the other side of the body, and thus he anticipated by more than two thousand years the discovery of the motor areas in the brain and their reaction to injury.

Some six hundred years after Hippocrates, came the great physician Galen (200 A.D.). A young girl was brought to him one day suffering from a severe depression, or melancholia. Galen placed his fingers upon her pulse and repeated in succession a number of names, without any change in the girl's manner or pulse. At last, he uttered the name of a popular actor of the day, a Roman matinee idol. Immediately the girl's pulse quickened. Thus did Galen use the first association test in history to discover the cause of a mental ailment; not even modern psychoanalysis has improved much upon this technique. And to him we are indebted also for the first accurate description of most of the brain and the sympathetic nervous system. He produced a paralysis experimentally by sectioning the spinal cord. He conceived the brain as the seat of the voluntary movements, the intelligence, feeling, and the memory. He classified mental diseases as of physical and mental origin; thus, he thought that alcoholic excess and an injury to the head, on the one hand, and shock, fear, or frustrated love on the other, could be held responsible for insanity.

In the third century of the Christian era, however, began the dark ages of the treatment of the insane. The concept of insanity, like that of sex, became coupled with the idea of sin early in this period, and was considered a form of punishment. Under the domination of the church, demoniacal possession became the official explanation of insanity. The soul alone mattered; the body and senses were denied and chastised. Man became the prize of a war between good and evil, between the Lord and Satan. Vampires, werewolves, and evil spirits moaned through medieval darkness and plagued the hosts of man; the Devil's Sabbath competed with the Lord's day. Monks described the sexual orgies of those "possessed" in sleep;

maidens awoke in terror and screamed out that the devil had entered into them, and they showed "witches' marks" to prove their claims.

The treatment of the insane from the third even until the seventeenth century was an indictment of Christian society. They were shackled and thrust into dank dungeons; they were beaten with sticks until the blood ran down their scarred bodies; they were treated worse than the lowest criminals, and their cries rose upon the air and made the passing citizen shudder and hurry on. Here were the accursed of God, the bargainers with the devil, the bewitched. Let us beat them until they are purged of their sins and the evil spirits have fled from their bodies! So they were starved and tormented and plagued by the keepers and visitors, who found them excellent sport.

It was not until 1547 that the first hospital for the insane was built. This was the famous St. Mary's of Bethlehem, soon corrupted to Bedlam. But the insane, still regarded as sinners or as the accursed, still continued to be treated with all the brutality inherent in the human race. Bedlam and the Lunatics' Tower in Vienna were beseiged by sightseers who paid admission to observe the antics of the afflicted. Great ladies in court dress spent their shallow curiosity in staring at those bereft of reason.

To Philippe Pinel, of the Hôpital Bicêtre in Paris, goes the credit for first treating the insane in Europe as human beings. Pinel became interested in them because of a friend who had escaped from a madhouse only to be eaten by the wolves of the forest. His proposal to unchain the inmates of madhouses and to give them good food and sunshine, incurred the suspicion of the leaders of the Revolution, some of whom suspected him of intrigue and wished to execute him as an aristocrat, while others thought him no better than his patients. But unchain them he

did, and he so inaugurated the treatment of the mentally diseased as the "sick." From then on, the insane were regarded as diseased in mind, as the physically ill were sick in body.

Pinel was indeed the great liberator of the insane. But even after he had struck their chains, let sunlight into their dungeons, given them beds and food to replace their vermin-filled cages reeking from excreta, those dominated by the theurgic, or medieval religious view, of insanity did not cease their activity. As late as the early part of the nineteenth century, Heinroth (1773–1843) taught that insanity was due to sin and that relief lay in faith and repentance! He fought the claims of Pinel and adhered with his dying gasp to the idea of demoniac possession.

## The Modern Conception of Insanity

We have gone a long way from the ancient conception of insanity. Today we no longer think of the insane as sacred or as devil-possessed or bewitched. Few believe that they are afflicted because of an unpardonable sin, and practically everyone will agree that many of the insane have high degrees of intelligence. We realize that their mental disorder is an illness and that they need sympathy and understanding.

But why are these people sick? And what kind of people are they? How do they differ from you and me?

The author could take you to the largest hospital for the insane in the world and "open your eyes." It is situated on an island and has a population of ten thousand souls, of whom eight thousand are patients. Hundreds of men go to and fro from plumbing shops, stores, laundries, and other establishments common to a small town. Many of these are patients and have worked and lived in peace there for more than twenty years.

Imagine that you talk to one of these unfortunates. After a half hour of conversation you say to yourself:

"Why, this man is not crazy. He answers intelligently and seems to be perfectly normal."

But then I ask him:

"John, did your voices speak to you last night?"

His eyes become ecstatic, as if some inner flame were spurting up within him, and he answers:

"Doctor, I heard the call again. God Almighty spoke to me and told me that with my suffering I should redeem the world. And I am happy. I am the resurrection and the life."

We pass on. Another man greets us. We chat about a book he has been reading, and then he tells us how he enjoyed the movie shown to the patients last night. He makes us laugh by the excellent imitation he gives of the comedian who was starred in the picture.

You decide he *cannot* be crazy, and you ask him to sit down. He sighs and says:

"I'm sorry, but I can't. I'm made of glass from the hips down."

We see, then, that many who are called insane are startlingly like ourselves, *except* for some quirk or peculiar attitude. Many go into a court of justice and fight their way to legal freedom because even an intelligent judge may be fooled by the cunning of some of these abnormals, such as the *paranoiacs*, whom we shall know later. Insanity is, in fact, a legal, not a medical term.

Psychosis is a word for insanity and may be defined as a persistent deviation from the normal way of thinking, acting, and feeling. Insanity, like crime, is one of our main "industries," claiming 75,000 new victims each year. Nearly a half million people are confined in hospitals and sanatoria of various kinds, suffering from different psy-

choses. There are, indeed, more people confined for insanity than for all other diseases together.

Psychoses represent the blind alley into which those in conflict blunder. What in one man may produce a neurosiss may in his brother precipitate a psychosis. The process i; always the same. The personality meets a life situation, it attacks or compromises, or it retreats into the safety and comfort of a disease. When it still maintains contact with reality and possesses insight into the nature of its disorder, it is essentially a neurosis. But when there is no realization of the plight, and contact with reality is lacking, a form of insanity is present. The distinction between these conditions is not always simple to make in borderline cases, as when we try to differentiate between a severe compulsion neurosis and dementia praecox; but what we have said may serve as a general principle.

In the main, there are two broad descriptions of insanity. In the first, the *organic*, the mental symptoms are accompanied by actual brain damage, due to injuries or to such diseases as syphilis, tumors, encephalitis, and arteriosclerosis, or hardening of the brain arteries. In the second, the *functional*, there are mental symptoms but no *demonstrable* brain damage.

The insane of the latter description constitute the bulk of our insane population and are known as sufferers from manic-depressive insanity, dementia praecox, and paranoia. Their disorder is due to psychic wounds of one sort or another; and because they are more important and more interesting, we shall discuss them first. As we turn to them, we will remind ourselves that we saw the neurotic as on a disabled ship, struggling against head-winds to make port; and that now we see the insane as shipwrecked, and drifting in a lifeboat towards the open sea.

## Manic-Depressive Insanity: Pendulum Personalities

Manic-depressive insanity is a disorder in which mood is altered and alternated. It is often characterized by an oscillation between extreme elation and deep sorrow. A patient describes it perfectly: "I'm never settled. I'm always on my way, up or down. It's heaven or hell—no middle ground for me."

It has been called the cyclic insanity because the emotional alteration occurs in a cyclic or wave-like manner. Sufferers from it are more like normal human beings than the gargoyles we shall see in schizophrenia. They seem like you and me, when we have carried an emotion to an extreme—when we have become too gay, too responsive, too active, too gloomy, too indifferent, too sad. But they often retain their insight, knowing they are not normal, and they do not lose so readily their contact with reality. Hence, this disorder again illustrates an important principle: that the psychosis harmonizes with the previous personality and tends to reproduce it as a morbid exaggeration. It is easier to picture what the manic-depressive was like before he became mad than to picture how the schizophrenic formerly appeared.

Hippocrates described the ultimate manic-depressive as sanguine and melancholic, these types being two of the four groups into which he divided all humanity. More recently, Jung has given us the extrovert, who is the beau ideal from whom the manic-depressive may develop. Kretschmer's cyclothymic personality has the same traits as the extrovert; he is frank, open, makes friends easily, has many interests, is brilliant, gay, and lives eagerly. On the other hand, he takes life seriously—he is conscientious, moral, social-minded, and dominated by a sense of duty.

However, the extrovert and the cyclothymic are the fertile soil for the implantation and flowering of a manic-depressive, or cyclic, insanity. They become too gay and sparkling, overactive and restless, and they run ahead of themselves mentally and physically. Or they become depressed, trifles weigh upon them, and they waver and cannot make up their minds to do simple things; they feel hopeless and worthless. They are swamped by their troubles; and often a sense of sin obsesses them, and life becomes the burden of Atlas. All varieties of physical complaints may torture them.

Kretschmer found that this cyclothymic temperament tends to occur with greatest frequency in the people of the puknik physique. These individuals have short arms and legs, are bull-necked, and have a large trunk; they suffer in middle life from diseases of the heart, blood vessels, and kidneys. The author's experience would indicate also that these personalities are sometimes based on a glandular disorder. They suffer from the alternation of excess and insufficient thyroid activity, and their periods might very well correspond to the alternation of mood seen in cyclic insanity. The manic-depressive is often, in fact, a thyroiddominated individual. On the other hand, Bleuler's interpretation is based upon the ambivalency and ambitendency of ideas. He believes that every idea is composed of two opposites and that this fact would explain why elation and joy should turn to depression and sorrow.

However, all explanations confirm that the disorder is founded on what one might call the "pendulum" personality, which often has a constitutional basis in the pyknik physique. We all know many individuals who are "a little mad" but who never become actually insane: these are modifications of the manic and depressive personalities who manage somehow to stay within bounds. The go-

getter, the super-salesman, the overactive citizen who serves on all committees and is forever making speeches; the club pest who "talks you deaf, dumb, and blind"; the women who never stop talking or interfering in everyone else's affairs; the people who cannot listen to anyone but themselves,—these are the cycloids, or cyclothymics. They often go through life as if on the verge of an attack of cyclic insanity, but some saving grace within them keeps them within limits.

A well-known radio artist, who cannonades his talks and whose dynamic personality and constant search for new thrills and experiences are retailed to worshipping thousands, is an excellent example of the hypomanic who remains balanced. The spark in his kind, however, not infrequently dies down, and the morbidness of mania or depression appears. People always ask how the hypomanic "keeps going." The answer is, they don't—always. We are familiar also with the dire prophets, the Cassandras, the "gloomy Guses." These individuals always expect the worst: in boom times, they predict a slump; in depression, they look for the panic.

There is no evidence that any germ causes mental disorder, nor have there been found any brain changes that might account for the distorted emotional reactions found in this psychosis. We know merely that in a cycloid, or "pendulum personality," a variety of conditions within or outside the individual may produce the symptoms of manic-depressive insanity. They may come as an attack of: depression, mania, or a combination of both, the latter including symptoms of both the former, such as exaltation but difficulty in thinking, and depression, with increased activity and flight of ideas (maniacal traits). The actual cause that brings out this abnormal reaction is unknown, as we have said, but it seems to be precipitated by certain

external events, such as grief over the loss of a loved one, failure in school or in business, a frustration in love, and acute illnesses like pneumonia, influenza, and infection in childbirth. Also, glandular disturbances, such as thyroid and adrenal dysfunction, may upset a personality when it is constitutionally *predisposed*.

The most important origin of these disorders is not physical but psychic. The external events are seized upon as an excuse; indeed, in many cases, the psychosis comes on without any reason for it being known to the sufferer or his family.

"He has everything in the world to live for: a family, position, and money. But he was always the worrying kind, doctor. Out of a clear sky, he began to mope around and get the blues. And in a few weeks, he began to act funny."

The real reason is to be found buried in the unconscious, in conflict. There is often no apparent reason for depression, nor can the patient give an adequate explanation after recovery. The nature of the conflict varies with constitution, social heredity, and psychosexual development. The environment contributes, at the most, a peg upon which the manic-depressive may hang his psycho-biologic inadequacy.

If we regard grief, worry, and other external events as excuses or partial explanations, we may understand why a melancholic will continue to grieve over his mother's death for months and years instead of getting over it in a few weeks or months, as most people do; for the degree of depression is much greater, where causes are similar, in the melancholic than in the normal individual. We may interpret this psychosis as an effort by the "pendulum" personality to compromise with inner conflict and as a defense against further psychic injury. There is no withdrawal from reality, as in *schizophrenia*; instead, there is a

flight *into* reality as a means of *escape* from conflict. This tendency, which along with insight is to the benefit of the extrovert personality, makes this a *benign* disorder, as opposed to the malignant character of dementia praecox. And it is largely to this that we owe the frequent recoveries from this psychosis.

The main symptoms of mania, which is the "crest of the wave" in manic-depressive insanity, are: flight of ideas, emotional exaltation, and psychomotor overactivity. Flight of ideas is often seen in such talk as the following:

"I'm a great scientist. That's the reason I was sent here. Wilson is the greatest man in the world; he's the head of our government. I have a headache but I'm not crazy. Look at the little birdie. I ought to go home; I'm not crazy. I feel fine. We're having fine weather. We ought to join the League of Nations. Do you know my mother? I'm going to make a million dollars with my inventions."

The thought wanders, influenced by chance associations, and no "goal idea" is ever attained; in other words, the talk is without point.

We see emotional exaltation in the following words:

"Never felt better in my life. I feel like a million. Million, million; hell, I'm going to have billions and trillions. Strong? Say, I'm so strong I'm afraid of myself. Ha! Ha! That's a good one!"

In the stage of psychomotor overactivity, these insane are constantly "on the go," as if being driven by some inner force; they leap to do one thing or another, may become irritated and pugnacious and attack people without cause. They may jump, wave their arms, turn somersaults, break things, yell, and never sleep. In the early stages, they are "sitting on top of the world"; they joke, smile, laugh, brag, and may give the impression of extraordinary mentality. Their general actions sometimes even foster a belief in

strangers that they are under the influence of alcohol or other drugs. Indeed, in a sense they are intoxicated; but the potion is most subtle, and its chemistry is unknown to us. They are drunk with the joy of realizing, in their activity and talk, long-repressed wishes; they are for the moment as free of their inner conflict as the alcoholic is of his inhibitions.

These three symptoms are, then, the marks of mania. They may be accompanied by distractability and the difficulty of focusing the individual's attention. This, in turn, makes it difficult for the victims to orient themselves as to place and person during the height of their attack. They love to be facetious and enjoy their humor immensely. Hallucinations and delusions, if present at all, are transitory. The latter are ideas of grandeur, but are not as extreme and improbable, as a rule, as in schizophrenia.

The only support of his widowed mother, Max Pollock had to begin working at fourteen. But he kept on with his studies and graduated from night high-school. His energy seemed inexhaustible; twelve or fourteen hours of work daily seemed not to affect him. At twenty-two, he had accumulated a tidy sum of money and owned a growing business. He had many friends, was a bubbling and effervescent personality, and was always the "life of the party."

But when he was twenty-four, his mother suffered a heart attack and was confined to bed for a few weeks. Max was depressed for weeks; he would not leave the house even after his mother was well, but sat around moaning, unable to eat or sleep. But gradually, under his mother's care and constant companion-

ship, he got better.

One morning, however, he left the house for a walk, and his mother noted that he was unusually elated. He drew five hundred dollars from his bank and started out on a buying spree. He bought things, later delivered, which neither he nor his mother could possibly use. He attracted attention on the street by his boisterousness and laughter, and by facetious remarks

he made to passersby. Then, when he attempted to drive away a car that did not belong to him, a policeman followed him and arrested him. Max was sent to the hospital for observation because of his irrational conduct. He sang, jumped about, waved his arms, and paced about day and night. Because of lack of sleep and refusal of food, he lost ten pounds in two weeks. But, under treatment, he gradually quieted down, and he left the hospital after three months.

Max had once passed through an attack of depression at home which was not recognized because he did nothing anti-social; this often happens. Mild depressions are put down as a severe case of the "blues" by lay people, and a thought of insanity never attaches to such attacks. Mania, if at all marked, seems to savor more of insanity than ordinary depressions. And Max's maniacal phase brought him into conflict with the law and caused his commitment. Overwork and worry would seem to have been the cause for his breakdown. But actually some deeper conflict, which we could not determine, brought on his psychosis. Max is well now and may remain so for months or years; I have known patients with periods of twenty years between attacks. But some day, Max will come back. They always do.

Now the crest of the wave leads ultimately to the trough—melancholia. This slough of despair is more serious than mania because it sometimes leads to the suicide of the "pendulum" personality. It is the more common phase. Many people suffer from mild depressions, with slight fluctuations to the other extreme, which are never recognized as forms of circular insanity.

The symptoms of melancholia, "the way down," are the diametric opposite of those of mania: difficulty of thinking; psychomotor retardation; and emotional depressions. Their severity may vary from what seems to be a gloomy mood to the depression with stupor, which is seen in the

worst cases. All of the characteristics are contained in this account, written by a victim shortly after recovery from an attack:

"The first thing I noticed was that I didn't seem to have any ambition, didn't want to work, and couldn't sleep. I began to lose weight, became irritable, and finally got so I didn't give a damn about anything. This started me worrying.

"Life looked hopeless to me, and I felt utterly worthless. An affair I had had began to prey on my mind. I became convinced that I had done the woman a great injustice and that I was a scoundrel, utterly unfit to live. My feeling of sin gave me my first idea of suicide. I tried to end it all by turning on the gas, but my mother came home in time to prevent it. I would have tried again, but I was watched every minute of the day and night, so I never got the opportunity. I sat around the house for weeks; I couldn't eat or sleep much. It seemed hard for me to think or talk; I couldn't write a letter or read. All I knew was that I felt miserable and wanted to die."

The following case will be illustrative of melancholia as it appears to the physician:

Jeffrey had been with us for two months and seemed to grow worse all the time. He sat in a corner of the ward and would not talk to the other patients, or even to visitors. His attitude was always the same. He sat with flexed body, hands limp in his lap, chin resting on his breast; his face was shadowed in sadness, as if he were seeing all the sorrow of the world. He had difficulty in answering my questions, even in monosyllables. At times, he would burst into tears, moan, wring his hands, and cry out:

"O God, I'm a poor miserable sinner. I've done the worst thing any man could do. Why don't you let me die? I'm no good—I'm rotten straight through. Please, please let me die!"

He was obsessed by this delusion of an unpardonable sin. What it was, he never would tell. I do not believe he knew himself that it was of an imaginary nature.

Later he became convinced that his brain was rotting away and that his stomach and intestines were stopped up. But after

<sup>&</sup>lt;sup>1</sup>The reader will observe that the mood changed first; then came the ideas associated with melancholia.

six months, the depression began to wear off and he made a complete recovery.

These cases illustrate not only the three cardinal symptoms but also the delusions that nearly always accompany such attacks. Patients always make false accusations against themselves of some unpardonable sin committed in the past—some sin which they are now being punished for. They also have hypochondriacal beliefs that they are losing their minds, that their organs are rotting away; or feelings of insufficiency, and a belief that some awful fate awaits them in the near future. The poet, William Cowper, who had three attacks of melancholia, describes in his poem "The Castaway" just how such a premonition of disaster affects the "pendulum" personality.

Suicide is often the melancholic's reaction to these delusions. By doing away with himself he hopes to atone for his unpardonable sins, make up for his worthlessness and futility, and forestall the suffering and catastrophe that the future holds for him. It is a form of escape; just as the neurotic flies into fantasy and infantile day-dreaming, as the schizophrenic flees reality, as the psychopath turns to wanderlust or drugs—so the depressive, broken by a reality before which he feels futile and inadequate, seeks to open prematurely the doors of eternity.

Probably all suicides are due to attacks of depression; when they occur in so-called normal people, the attack has not been sufficiently prominent to attract attention and recognition. Freud ascribes suicidal tendencies to the operation of the "death instinct"; through it, a "pendulum" personality, routed by reality, expresses his hate of life and gratifies his longing for peace. All melancholics harbor this desire. It is important that they never be alone, for even a moment.

The following case illustrates the importance of never relaxing vigilance:

Floyd Smith had been depressed for two months and had been frustrated in three attempts at suicide before coming to the asylum. Under care his spirits seemed to improve, and since it began to look as if he were on his way to recovery, one night he was allowed, for the sake of encouraging him, to sleep in a room by himself. The next morning, he was discovered hanging from the transom by a rope made of bedclothes.

This case shows the tendency of melancholics to conceal their suicidal intentions until they get an opportunity to do away with themselves. They will use any method that will accomplish their purpose. The author has known them to hang themselves by their suspenders; to cut their arteries with glass obtained from window panes; to swallow shoe polish or glass; to butt their heads against walls; and to cut their wrists with spoons sharpened to a razor edge.

Suicide, like clothes, has fashions. A few years ago, for example, poisoning by bichloride of mercury enjoyed a vogue. A member of a certain class who commits suicide will be emulated by others belonging to the same group. Thus, we had a suicide epidemic among young college students several years ago. It is interesting to note that in this epidemic two of the suicides were the sons of psychiatrists: it is said truly, that the "shoemaker's children go barefoot"!

The so-called artistic temperament, which is essentially cycloid, furnishes more than its share of suicides. Leonid Andreyev made several attempts on his own life; his work shows the characteristic genius of melancholia. The supposed *Weltschmerz* of his "Life of Man" and "Anathema" is but a thinly concealed reflection of despondency and of a despair into which he was plunged by an attack

of melancholia. Other Russian writers of his time, like Artzibasheff, attempted suicide, probably in emulation.

The treatment of this disorder consists of careful nursing, isolation of the individual in a hospital, psychotherapy, and constant observation. Sooner or later, nearly all recover from the immediate attack.

Involution melancholia is a variety of depression which comes on after forty years of age and is related to the physical changes of middle age—especially to the cessation of menstruation. It was first thought that this disorder was an entity in itself, but Dreyfus' study revealed that it is really a form of manic-depressive insanity, coming on in middle age. It develops gradually, and the entire organism is profoundly affected: painful digestion, lack of appetite, insomnia, irritability, and easy fatigue initiate it, and soon the individual is dominated by psychic pain. Anxiety often appears, and the victim becomes intensely agitated.

Frieda Baum was of a nervous, irritable disposition. As a child, she had been moody and given to fits of the blues. She married at the age of eighteen, but although she enjoyed her life with her husband and two children, she still had spells of depression.

At fifty, Frieda went through menopause. Two years later her husband died, and in the six months following she became profoundly depressed. She was fairly "well off," but she began to complain of poverty, and refused to buy food sufficient to keep herself and her children from starvation. She ate almost nothing, and would not have visitors because of the expense involved. At length, she would not even leave her room, in which she would sit moaning and beating her breast, crying out that she was guilty of a terrible sin. She was convinced that neighbors were talking about her and saying that she had neglected her husband in his last illness because she wanted his insurance.

In the hospital she expressed ideas of reference, had hallucinations of the nurses calling her immoral and wicked, and com-

plained of headaches and pains all over her body—complaints which proved to have no physical basis. For months she was almost sleepless; she lost weight and continued to be possessed by her delusions. She begged for death to free her from her troubles and twice attempted suicide, being prevented only by the vigilance of her nurses. After a depression which lasted two years, she made a complete recovery.

The illness of Frieda Baum is representative of many cases of melancholia that come to the psychiatrist's attention. About seventy per cent of the victims of this form of melancholia recover completely. Twenty per cent die in suicide, by wasting away, or from intercurrent diseases like tuberculosis and pneumonia. And the remaining eight or ten per cent become dementia praecox patients, due to a hardening of the arteries of the brain.

In general, the chance of recovery for melancholics is fairly good. They approximate the normal personality, maintain their contact with reality, and possess insight which makes them accessible to psychotherapy. Institutional care and the protection of them against themselves will bring them through the acute attack. A study of the life situation and proper mental hygiene—as described in the last chapter of this book—may be successful in preventing recurrences of the attacks.

### Dementia Praecox: Schizophrenia

Dementia praecox is the bane of every psychiatrist's existence; he knows no cure for it, and its exact cause is unknown. It is a malignant psychosis in that only about ten per cent of the victims spontaneously get well. There are more than 30,000 new cases yearly, and it occurs in adolescence or in early adult life. For most, the diagnosis is tantamount to a condemnation to a living death; the few who get better are salvaged when the disease is incipient.

It is true that we do not know what actually causes this dread disorder, but we do know what kind of personalities succumb to it. This is our only hope in stemming the swelling tide of this form of insanity. If we can get at these types early enough, we may be able to prevent their later wreck upon the reefs which await them.

The schizoids are the introverts, the "shut in" personalities. They are directly headed for schizophrenia (dementia praecox), which is so called because there is a splitting of the emotional, intellectual, and motor processes of the individual. The schizoid is a split personality; he is torn between an apparent desire to adopt socially and the stronger force which draws him away from the world and into his shell. Schizoids are bad "mixers"; they try, or say they do, to like people, but they can't. They are reserved, taciturn, eccentric, timid, self-conscious, and suspicious; others may be dull, stupid, and stubborn; and some are irritable, nervous, and given to jealousy. They do not adjust because they cannot get along with anybody, at any time. They are often maladjusted sexually. They show one personality to the world and possess another within, which becomes known to us when the schizoid is an artist or poet or genius, as he sometimes is.

There is some ground for the belief that genius is touched with madness, for the schizoid personality not only is found in the ranks of the supermen but occasionally actually helps them to become supermen. The scientist who withdraws from the world and absorbs himself in research, often makes epoch-making discoveries because he is able to concentrate upon his problem without social distraction. The poet, shy and sensitive and repelled by the vulgarity of the herd, transforms their ridicule and dislike of him into rhythms of startling beauty. Lafcadio Hearn was a schizoid genius. He quarreled with many people and deserted the white

world; he lived in Japan and married a Japanese. He, too, could get along with no one. But he transformed the wounds the world dealt him into a miracle of imaginative stories: "Chinese Ghost Stories" and the fairy tales of Japan show the flowering of an exquisite genius that was "too sensitive" to live in the real world.

Musical genius has often gone hand in hand with schizoid traits; the source of inspiration is found in fantasy and day-dreaming, which gives these "queer ones" a "lift" above the humdrum existence of the rabble and the monotone of the workaday world. Berlioz was an example of this "queer" genius. Political idealists and reformers are unable to get along with people in particular but love humanity and plan Utopian schemes to make this the best of all possible worlds. Religions and cults owe their origin to schizoids like Savaranola, Luther, and Calvin, who were fundamentally stirred by a Messiah complex. monastic, ascetic, and religious hermits of all times have often been schizoids to whom the real world has been repellent. The scholar and erudite working his study, the philosopher cloistered in Koenigsberg, the scientist absorbed in his laboratory, the mystic receiving the revelations of another world—these too are schizoids. However, the geniuses constitute but the few of the extreme schizoids; the many jam the asylums, and their plaints flame with the heat of their madness.

Kretschmer has proven that there is a constitutional basis for a schizophrenic reaction. The future victim often belongs to what is called the asthenic type; he has long arms and legs and a small trunk; his neck is long and his eyes tend to protrude. He has a small heart and thin blood vessels, and he tends to develop tuberculosis of the lungs. Sometimes, he suffers from a glandular disturbance, the most common being an insufficiency of adrenal cortex, which causes a low blood pressure, muscular weakness, and an inability to learn. However, while individuals of this physical type are candidates for schizophrenia, they do not all succumb; and there are many schizophrenics who have no such constitutional basis for their reaction. But the physical stigmata should be of service in putting us on our guard and helping us to select the children who most need prophylactic care.

Seclusiveness is one of a long list of factors that predispose schizoid personalities to breakdown. The outstanding schizoid trait is their lack of sociability and disinterest in ordinary activities such as athletics, parties, movies, the theatre, and the routine social pleasures. They prefer to read in their own room; they go out of their way to avoid people, are embarrassed and shy in company, and are happy only when they are alone. A mother tells her story:

"John was never like other boys. I couldn't get him to go out and play. He always wanted to stay in the house and read, or sit and have me tell him stories. His eyes would be kind of dreamy-like, and often I was sure that he was not listening. Sometimes I would hear him talking to himself in his room.

"I knew it was bad for a boy to be alone so much, but he never made trouble and was so good that I didn't have the heart to make him do anything he didn't want. He always liked books and loved to talk to older people about God and things like that. It's no good for a child to be so deep. I guess worrying about things like that drove him crazy."

John was one who reaped the crop of his seclusiveness and morbid desire for solitude. However, many of the world's great have benefited by this schizophrenic trait. Thoreau retreated from the world to Walden and formed his philosophy. Kant, cloistered in Koenigsberg, and Spinoza, grinding lenses in Amsterdam, found in solitude an appeasement of their thirst for an understanding of life. Pascal forswore science and retired to the Abbey Port-Royal to

write in solitude the great "Apologia Pro Christiania." Hermits in the wood, sages in the desert, and wanderers upon the ocean have detached themselves from life in order to learn its secret; schizoids all, they somehow maintained their sanity. But for the average individual, a morbid desire for seclusion is the first flush of the dawn that heralds schizophrenia.

Oversensitiveness, another trait of the schizoid personality, also predisposes the individual to insanity. A college sophomore says:

"I don't know why, but I'm always getting my feelings hurt, doctor. My classmates are always poking fun at me, and I can't do anything about it. Sometimes, I feel so miserable I want to run away and hide forever."

This is the "sensitive plant" to whom the hurly-burly of college life is distasteful. He would much prefer to be alone, but college will not let him. He is shy and self-conscious and undergoes daily tortures from "slights" he suffers at the hands of his friends. He desires to retreat, but he has enough "stuff" in him not to run away, although he is hurt.

Undersensitiveness is found among those who are the diametric opposite of the "sensitive plant." These individuals attain complete objectivity and show emotional indifference even to death. They are often the "thrill murderers" and the moral imbeciles. When they remain social, we see them exemplified as in the figure of Jeffries, the "hanging judge." A prominent jurist is of this type. He boasts the largest number of death sentences and uniformly hands out the longest jail terms.

Detachment, another factor in the schizoid personality, is seen in individuals who are morbidly reserved and hold themselves aloof from everything and all people. Some-

times their disinterest is so marked that it is mistaken for stupidity. But these are schizoids who are not socially conscious, who have nothing of the snob in them. They want no friendship, are not interested in community programs, and crave nothing so much as to be left alone. Boys of this kind refuse to "root" for school teams, do not mix in school politics, and do not compete for the distinctions of scholastic life. Except to attain honors in their studies—in which they often excel, thereby adding to their unpopularity—they tend to withdraw from everything which savors of competition.

Irritability is in reality a defense mechanism for the schizoid and is designed to insure him the seclusion he desires above everything. He obtains his wish, for the world lets him severely alone. He is common as the crabbed banker whom everyone hates to approach for a loan, and as the town miser, who spent a lifetime in accumulating thousands of dollars and not a single friend. Youths with this trait are mean, given to fits of temper, surly, and ill-spoken. This is their armor, designed to protect them from the world's barbs and to permit them to live within themselves.

Aggressiveness is not a conspicuous schizoid trait, but it is found in certain schizoids whose idealism is too strong for their fundamental desire to retreat from reality. The trait represents an attempt to make reality conform to their desires and so to alleviate their internal conflict. They are found in the ranks of communists and labor agitators; they are political revolutionists and Utopian schemers; they are the leaders of lost causes. They flit from one revolt to another and are never happy unless they are fomenting trouble and decrying the existing order. They are the eternal minority and sometimes do not know clearly what they are fighting for.

One of the most morbid of all character traits is suspiciousness, and when found in a schizoid it indicates that he may become the most dangerous of all the insane—the paranoid. Suspicion is the end of the trail and warns us that the schizoid is about to become a schizophrenic. The following quotations illustrate the paranoid's attitude:

"My wife doesn't love me any more. Perhaps she is interested in someone else. Sometimes I'm sure she wishes I were dead, so she could marry again. My food hasn't tasted right recently. I wonder if she is putting anything in it?"

"I would have gotten through my exams all right except for Professor Henry. He has it in for me and told the other "profs" to flunk me so I would get kicked out of college. I know he did it. I saw him talking to one of my instructors, and when I passed they gave me a funny look. That shows they were talking about me."

Paranoids cannot be made to see the absurdity of their ideas; they refuse to accept proof of the falsity of an idea that would convince anyone but a schizoid who has begun to break down. He is beset by doubts, fears, and obsessions. Gradually the idea of protection creeps into his mind. In the end he determines that the only way he can save his life is by killing his wife, his neighbor, or whomever he has fixed upon as his persecutor.

The paranoid is rarely cured, and his suspicion grows with the years. He is always a menace to the community and may pick on anyone as the cause of his trouble. People in small towns look upon him as a "harmless" crank until one day he murders someone. Every year the newspapers tell of dozens of such homicides. The perpetrators are often very cunning and conceal their paranoid ideas until they are paroled by a state hospital for the insane or released on a court order. It does not take them long to show how wrong their judges were. A hospital for the insane with which the author was once connected released four men within three months who killed an innocent person within a week after their discharge.

Inferiority is the germ from which all the traits of the schizoid already presented may develop. The feeling of inferiority is extremely widespread and occurs even in normal individuals. Some possess it by virtue of being of a racial or religious minority; others because of their social status; and still others because of physical defects, such as stammering, near-sightedness, difficulty of hearing, harelip, cleft palate, or deformed limbs. In some, the sense of inferiority is based upon a glandular weakness; the lack of adrenal cortex causes quick mental and physical fatigue. The adrenal sufferer feels inadequate and, try as he will, cannot keep up with his mates; and out of this grows a conviction of his own inferiority.

Inferiority always comes through comparison; not being able to hold up your own end, not being good enough for the routine social demands, "not belonging." When to this is added the ridicule of playmates and the lack of sympathy and love and understanding at home, the schizoid personality gets its start. A sense of failure and weakness grows, and with it comes shame and a desire to hide one's inability. Then begins the retreat; the sufferers become oversensitive and fancy insults where none are intended; they dissect and analyze themselves and worry about triffing blunders which the average youngster forgets the moment after he has committed it. They become nervous and irritable, and have a chronic "chip on their shoulder." They brood and get fits of depression. Their confidence fails, and they avoid tests of their abilities, fearing the worst. And at last they retreat more and more into their shell, hoping by seclusion to avoid the wounds

which reality deals them and which have become unbearable to them.

Many people, as we learned in a previous chapter, overcome these handicaps by compensation and achieve some measure of happiness. But upon certain soils—where the conditions are wrong—a faulty home environment breeds the feeling of inferiority. Adler has of course given us the idea of the inferiority complex to which, he claims, people react consciously or unconsciously; thus the hard-of-hearing become Beethovens and Mozarts, the near-sighted Manets and Gaugins, the stammerers Demosthenes'. But although this theory has in it some truth, it has nothing like the universal dominance claimed. Historical examples offer many exceptions.

Children outgrow a natural sense of inferiority; they realize that their inadequacy is merely a matter of age, and they talk of what they will do "when they grow up." They stifle their impatience by fantasies and by games in which they function as grown-ups. Every child hates to be called "little"; thus young boys plague their parents for their first pair of long trousers, and cigarette-smoking and other adult habits are cultivated prematurely in secret.

The following case illustrates how the home may breed a morbid sense of inferiority:

A boy of seventeen, a college freshman, said to the author: "My parents used to quarrel a lot when I was a kid because my father used to drink a lot. The fellows used to call dad 'an old soak,' and make me fly into a rage. My folks were divorced when I was fourteen and I lived with my mother. I always felt that people held it against me because of my dad, who didn't amount to much.

"When I was fourteen, I got these pimples all over my face and I thought people were looking at me and talking about me behind my back. When I spoke to mother, she shut me up, saying she had enough trouble of her own. She told me that I never was meant to be a beauty—that I ought to be glad I

had a home, and stop thinking about myself.

"Maybe I do worry too much about myself. But I never could talk to mother; and there are lots of things about which a fellow wants to ask questions. When dad was home, I didn't dare open my mouth for fear of getting licked; he was always saying that children should be seen and not heard."

I spent many hours trying to break down his schizoid barrier. But he "flunked out" at the end of his freshman year. I'm convinced that he did not lack brains. He was the victim of

selfish parents.

There is no germ known to cause schizophrenia. Thousands of brains removed at autopsies have been studied, but no changes that may be said to be characteristic of this psychosis have ever been found. Exhaustive examinations during life show little—outside of endocrine imbalance and the schizophrenic constitution—that may give a physical explanation of this bizarre disorder. Schizoids become insane because of psychic wounds such as sorrow, unhappy love affairs, or career failures; and through a disease like influenza, whose poisons seem to be the last straw for the personality.

The schizoid, glandularly deficient, becomes tired of struggling to keep his head above water and in contact with reality. He lets go and sinks back into the oblivion of introversion, where in fantasy he finds peace. The adrenal insufficient who "gives up the ghost" and stops trying to keep up, usually becomes the hebephrenic, the stupid type of schizophrenic. The schizoid dominated by suspicion may evolve into the paranoid, or if highly intelligent and not losing his contact with reality, into a paranoia vera.

The dominant note here, as in the neurosis, is conflict. The final or precipitating cause need not be of major significance and often does not seem capable of bringing on such a profound disorder; but in a sensitive personality, a

minimum of wounding may develop a maximum distortion. The schizoid is constantly torn between the desires, hopes, frustrations and demands of his unconscious, and the pressure of reality. He compromises as long as he can. But ultimately repression causes regression; in the fantasy and the day-dream, he licks his wounds. But when this ceases to comfort him, it needs but some slight or even fancied insult from reality to send him trembling back into the darkest depths of regression; here, in delusions, hallucinations and mood dissociation, in detachment from reality, he finds the peace of schizophrenia.

The disease appears usually before the age of twenty-five and is especially prominent during adolescence; this is as we would expect, since conflicts are greatest at this period, when biological inadequacy comes to the fore. The disease usually comes on gradually; when the onset is stormy and acute, the outlook for recovery is better. Most cases require weeks or months to "bloom."

There are four more or less well-defined types which characterize the schizophrenic reaction. These are:

- (1) Hebephrenic, in whom stupid, silly reactions predominate.
- (2) Catatonic: rigidity, stereotyped attitudes, catalepsy, and refusal of food are common among these sufferers.
- (3) Paranoid: these individuals are marked by trend reactions—delusions of persecution, ideas of reference, and accusatory hallucinations.
- (4) Simple: deterioration and degeneration of emotion and intellect occurs among these patients.

The change in the character of the individual is accomplished by many deviations. While the four types are found pure, it is not infrequent to see symptoms of one appear in another. Thus, a paranoid may show the silly

behavior that characterizes the hebephrenic; a catatonic may hear "voices" accusing him of degeneracy. Above all, the psychosis serves to cause a morbid exaggeration of the previous personality; the suspicious ones become more suspicious; the seclusive may shut out reality completely by pretending not to hear or notice what is going on about them, or by going into a stupor. That this principle dominates all the psychoses was verified by the author in a study made some years ago, to which reference will be made in our dealings with organic mental disease.

Among the symptoms of schizophrenia, the behavior abnormalities take many forms. The victim is silly, laughs, or cries without reason; he does incongruous things, or repeats the same act over and over again; he is untidy, and frequently wets and soils himself. Some patients apparently take the same sort of pleasure as an infant or child demonstrating his power by not controlling the excretory functions; thus they demonstrate their infantile reaction to life. They show peculiar mannerisms and are given to impulsive outbreaks, in which they may attack another patient or an attendant without reason. This train of conduct abnormalities is best seen in those of the hebephrenic group. On the other hand, the catatonic's behavior is characterized more by rigidity, catalepsy, stupor, and the refusal of food. He strikes attitudes and may stand in a pose for hours; he may remain mute, or do exactly the opposite of what he is told. Some behave as automatons and go through a series of movements like a robot. The paranoids, however, may show few or none of the behavior disorders. Often one can not believe they are insane until conversation brings out their delusive ideas.

The conversation of schizophrenics, especially of the hebephrenic and catatonic type, is marked by incoherence, rambling, repetition of meaningless words, and neologisms,

or invented words. The hebephrenic may speak as follows:

"Good morning—good morning—its warmer in the summer than in the country—ha! ha! I've got lots of money—boom! boom! boom! I don't care for any honey—would you like to see my picture that I just drew?—the weather's fine—fine—Ifeel fine—just fine—tomorrow's another day—ha! ha!"

Alteration of mood is another symptom common among schizophrenics. They are apathetic and indifferent, or show perversion of normal emotional response, as when the hebephrenic bursts into laughter when he is told his mother is dead. More often, nothing affects them; they show little or no interest in the outside world with which they were once concerned. They seem as if they have cut off all communication with reality. The trend reactions—delusions of persecution, ideas of reference, hallucinations—are most important because of their anti-social character and because they make schizophrenics dangerous. The patients feel mistreated, as when they believe that their food is being poisoned.

"I know they are following me; wherever I go, I'm 'tailed.' My wife wants me put out of the way. I don't dare eat. My food tastes funny. I'm sure she's putting arsenic in it. She has always had it in for me. I don't know why. I've tried to be a good husband."

"The Masons are after me. They had me fired and now they are going to put me 'on the spot.' I don't know why—I never did anything to them."

Ideas of reference also are common:

"People are always talking about me. Even when I walk through the streets, they pass remarks about me. How can I tell? By the way they look at me." Ideas of influence may be expressed as follows:

"I tell you that I'm being hypnotised. He lives next door and by mental telepathy he keeps me under control. I can't help myself. I must do everything he wants. Sometimes I feel stinging sensations in my legs and I know he does that by a special kind of radio machine just to torture me. I tried to make him stop but he won't listen to me—he just looks at me in a funny way. And that makes me stop talking."

Of the many possible hallucinations, more than eighty per cent are auditory. The victims hear "voices." Joan of Arc is a historic example of one who had auditory hallucinations. They "see" and "smell" and "taste" things that have no real existence.

"It began with a noise in my head. It just wouldn't stop pounding. Then it got so I could understand what the noises meant. The voices talk to me every day and tell me what I must do if I want to be saved. Sometimes I see God Almighty. Yesterday he came to me in this very room. I could see him as plain as I see you. I can't tell you what he told me. Most of the time he sends me messages through the voices. Once I got a message through a sparrow."

Delusions are false beliefs to refute which the victim will not accept logical proof.

"I'm telling you I can't eat because I haven't any stomach, and I can't move my bowels because my rectum is stopped up. I feel a buzzing in my head; someone is giving me electric shocks all the time."

Another patient insists he has no mouth, although he is confronted by a mirror.

Ideas of expansion also are common:

"God spoke to me and gave me a mission to perform. I am the prophet of a new religion, and those who listen to me will find salvation. The Almighty speaks to me all the time. I was born to bring man back to God. I can never die until my mission is fulfilled."

Delusions of various kinds, especially among paranoids, are present in more than half the cases of schizophrenia. They are poorly systematized and often vague, unlike those of the true paranoiac, who can give a good reason for his false beliefs and is infinitely more dangerous. Delusions may sometimes be based on some misunderstood trifle and may be elaborated into a vast system. They project repressed desires of the victim and tend to give him an importance in the real world that he desires. If the Masons or the Roman Catholic Church are trying to destroy him, he must be a person of prominence! Also these individuals frequently deny their parents and hint that they are in reality of noble birth and were stolen from the cradle. This delusion arises from the not-belonging-to-one'sparents fantasy of childhood; in the schizophrenic it assumes absurd and irrational proportions, but it serves to give him ego-satisfaction.

Delusions, then, are the result of rationalization and are based upon the defective judgment that is outstanding in the schizophrenic. Everyone has delusions: you yourself may be possessed by a jealousy without grounds; but you will accept proof that it is false, and you will abandon it. An entire community can have a delusion, as did New England about witches; wars lead one nation to accept false beliefs about the enemy's barbarity. But time and rational evidence will destroy these, whereas, in the schizophrenic mind, they become more and more fixed because defective judgment does not permit them to accept proof to the contrary. They are fixed either because they represent frustrated wishes, as those of grandeur, and are thus realized in the conscious life of the individual; or because they stand for some tabooed desire, such as homo-

sexual tendencies, which is *projected* upon someone else—whereafter the schizophrenic hears a voice calling him "pervert." He has thus rid himself of a painful idea by attributing his unconscious desire to someone whose accusation he can deny. By "taking it out" on someone else, he frees himself from inner conflict.

Among other delusions seen in schizophrenia are the hypochondriacal, of which the following case is illustrative:

"How can I eat when I have no mouth? I'll starve to death, that's what I'll do. I haven't had a bowel movement for weeks and I've pains and aches all over."

Delusions of grandeur are especially familiar:

"Sure, I'm the Christ. God spoke to me and told me that I would redeem all humanity with my suffering. Jesus—that's who I am."

Disorientation is also the result of defective judgment. Lacking insight—this is the great barrier to cure, since psychotherapy is seldom successful when the patient will not believe he is insane—schizophrenics frequently misinterpret the normal concepts of time, place, and person:

"Where are you, John?"

"In a theatre." (Actually, I am examining him in my office.)

"What year is this?"

"1980."

"Who am I? Am I a nurse, a lawyer, or a doctor?"

"You're the butcher, the baker, the candlestickmaker!"

The following case histories describe schizophrenia more particularly:

Mary Cannon; a twenty-two-year-old saleslady, was committed to an asylum because of peculiar behavior in a doctor's office. The story told by her family was that she began to behave "queerly" a few weeks before, after her first visit to the family physician. She had gone to see him about irregular menstrua-

tion. Two days later she had muttered, "The doctor was influencing me; he wants me to love him."

She became very untidy and at times exposed herself. She was observed to be talking aloud in her room and seemed to be carrying on a conversation. She said "voices" spoke to her and accused her of immorality; she felt that "people are talking about me." She smiled and laughed without reason. For a few days she became depressed. Later she spoke of "dying in order to bring happiness into the world," and she spent many hours in prayer.

Her sister said that "Mary was peculiar as a child." She had been very devoted to her father, but otherwise had had little to do with anyone else; she would shut herself up for hours in her room, and she had never played with other children. As she grew older, she had suffered constantly from fancied slights and could not get along with the people with whom she

worked; she seemed "to walk about as if in a trance."

In the hospital, Mary was silly, and laughed and talked to herself. At times she would abuse and strike other patients whom she accused of "torturing" her. She told me that the "Catholics are after me" and that "voices" accused her of illicit intercourse. In a few months, she deteriorated rapidly; she wet and soiled herself; she abused herself openly, smiled and laughed without reason, and reacted to visual and auditory hallucinations.

Here we see the hebephrenic developing in a schizoid personality. A faulty home environment which permitted her to indulge in her seclusive tendencies fostered her abnormal development. Her history revealed an overattachment to her father, and a lack of knowledge of sex hygiene that led her to worry about irregular menses. Her business associates teased her because of her inability to attract men. She began to worry about self-abuse, and the reading of some trashy pamphlet made her fear she was going insane. Her delusions represent an externalization of her desire for a sex life and a growing fear that her lack of physical attractiveness would make her an "old maid."

But proper home conditions and a normal psychosexual development might have prevented her breakdown.

This case emphasizes that treatment of insanity is, and should be, essentially preventative rather than curative. The rôle of mental hygiene and other measures of treatment will be discussed in the final chapter.

Roger South, twenty-five years of age, was arrested for creating a scene in the mayor's office. He had informed that official that the "police were persecuting him" and had demanded that the police commissioner be dismissed, since he was plotting to ruin him.

From his mother's story it appeared that Roger had been normal in every respect as a boy except that he was "always suspecting and thinking that his brothers and sisters were favored over him."

He had graduated from high school with a good record and had made good in business. At twenty, he had married, and he now had a three-year-old son. His jealousy of his wife was well-known, but was dismissed as in "his nature."

Six months before his arrest and commitment, Roger's conduct had become peculiar. He began without reason to accuse his wife of receiving attentions from other men; he spied on her constantly, and though he found nothing to justify his suspicions, he threatened her. He became convinced that several detectives were trailing him at the insistance of his wife and the police commissioner. He refused to eat at home; he *knew* his food was "doped." Later he developed the idea that "machines are being used on me when I'm asleep to make me rot away."

He took long trips to "avoid" the "detectives," but they followed him everywhere. He was sure they were spreading bad reports about him, and he decided that they were "getting ready to put me out of the way." He purchased a revolver for protection. He heard accusatory "voices" and insisted he was being persecuted, although he could not explain why.

He was well oriented and could discuss a variety of subjects very intelligently; but he lacked *judgment* and had no insight into his condition. He was prepared to go to the highest court

in the land to rid himself of persecution; if that failed, he was

prepared to take the law into his own hands.

The longer he stayed in the hospital, the more he was dominated by his persecutory ideas, and he deteriorated slowly. He continued to hear "voices," became more and more suspicious, and refused to talk even to his mother when she came to visit him.

This case represents the formation of a paranoid schizophrenia. The outlook for recovery is hopeless, and the patient so dangerous that he should never be released as long as the ideas of persecution persist. He is the ultimate in the development of a suspicious schizoid personality.

Fred Haas had always been thought of as "queer." As a child, he had been secretive and had invited none of his brothers to take part in the games with which he amused himself. He had had fits of temper when anyone interfered with him. He had been given to day-dreaming, but had never confided to anyone the thoughts that occupied this fantasy life. As he grew older, his restriction of interests became more marked. Despite the urging of his family, neither sports nor social activity seemed to hold any attraction for him.

When he was sixteen, he became disturbed at school when some of his classmates accused him of masturbating. That evening he began to brood, and refused to eat his dinner. The next morning he would not go to school; he said that all the boys were talking about him and that they intended to kill him because of his sins. During the next few days, his delusions of persecution and ideas of reference were supplemented by auditory and visual hallucinations. He felt snakes gnawing his stomach and saw the faces of enemies staring through his windows, threatening him with his misdeeds. He often screamed and sang and answered imaginary voices. After a few days he quieted somewhat, and finally became mute, merely grimacing when questioned. He had to be dressed and undressed; and as a result of eating almost nothing, he lost weight very rapidly.

In the hospital, he was mute, resistive, negativistic, and had to be fed by a tube. He developed a catatonic stupor and remained in that state for several months. Gradually, under treatment, he came out of it, but he continued to attitudinize,

and seemed completely withdrawn from reality.

One year later, he had recovered somewhat, but he was still dull, non-coöperative, and delusioned. At times he reacted to visual and auditory hallucinations.

This case is representative of catatonia, the reaction being built upon a "shut-in" personality. In the patient's childhood are revealed the roots of the psychosis, which ramified in his unwise up-bringing. Early in life he manifested the introversive tendences which later brought about his mental collapse. He was allowed to indulge himself constantly in day-dreams, and thereby gradually to withdraw himself from reality. No one made any attempt to develop in him an idea of coöperation, or to socialize him. Hence, he was literally shut off from the outside world.

Furthermore, as a consequence of a stupid attitude toward sex on the part of his parents, Fred Haas conceived the idea that, in masturbating, he was committing an unpardonable sin. This led to much anguish; and, added to this, was the ridicule of his fellows, which made life still more unbearable. Had he been properly prepared for the advent of adolescence, probably he would not have fallen into insanity. As it happened, he found in catatonia a welcome release from the torment of reality.

Cases like this illustrate the importance of mental hygiene. Fortunately child-guidance clinics, the visiting-teacher movement, and the efforts of sociologically minded psychiatrists are now reducing the ranks of those who, like Haas, are potential recruits for the army of the mentally sick.

#### Paranoia

True paranoia is a rare mental disorder and is seen in less than one per cent of the population of hospitals for the insane; many paranoiacs, in fact, are never committed. Because of their cunning and their astounding similarity to normal people, psychiatrists often fail to convince judges that these individuals are dangerous. The "paranoiacs" commonly described by newspapers are most often people in a paranoid state occurring in schizophrenia or in organic psychoses like alcoholism.

Paranoia vera is an incurable disease arising in middle age. There is no known bacillus or brain change which has any causal connection. It arises in people whose previous personality has been of the schizoid variety. They are egotistical, self-centered, and above all, suspicious—a trait which leads easily into the morass of the persecutory delusions by which the paranoiac is dominated and against which he reacts often by the wholesale murdering of his imaginary ill-wishers. They come from the ranks of the "misunderstood," the "discriminated against"; they are the individuals who always suspect that "something is being put over on me."

"Even when I was a boy, I never got a break; my mother and sisters always gave me the worst of it. When I grew up, it was the same way; they never could get my point of view. Sometimes I wondered if I were really related to them; I used to think that they had adopted me because they certainly didn't treat me like one of their own flesh and blood.

"Last year my food began to taste funny. At first, I didn't catch on. But soon it dawned upon me. My money—that's what they were after."

The disorder may develop after the loss of a lawsuit. Such individuals will go through court after court and write to the President, complaining of injustice. As a group, they suffer from so-called *litigation paranoia*. Also, paranoia may take the form of religion, and through delusions of grandeur the individual may build himself up into a prophet or a messiah. But so well retained is the personal-

ity, that thousands will not believe him insane, and they will follow his teachings.

The paranoiac has three outstanding characteristics, these being delusions of persecution, delusions of grandeur, and complete preservation of personality. Delusions of persecution are often based upon a misconstruction of an actual situation; the loss of a lawsuit, for example, convinces them that there is a gigantic plot to ruin them: the judge is a Mason, or an emissary of the Pope, sent to break up their lives. Delusions of grandeur are often overcompensations for feelings of inferiority. They arise through a desire of the patients to find a rational basis for their ideas of persecution. If they can make real a fantasy that they are of noble birth, or that they are a great inventive or scientific genius, their importance becomes a logical explanation of why men like the Pope or the President, or organizations like the Masons or the international police, should be trying to destroy them. Both delusions become more and more fixed as the paranoiac grows older; he therefore becomes incurable and dangerous.

The fluid characteristic of the true paranoiac is, as we have said, complete preservation of personality. In him there are no methods of conduct or other disorders except those logically derived from well systematized and related delusions. In every respect, the paranoiac acts like the normal person. He submits to authority until he feels danger imminent; he controls his emotions and is coherent; he often lives more or less happily for years without doing anything about his false beliefs; his memory is excellent, and he is very often highly intelligent.

Every community has its odd personality or so-called "harmless crank." But one day, such a man kills his wife and children, or shoots a prominent official who he believes has plotted his ruin: two Presidents have been

murdered by paranoiacs. Or perhaps, he becomes an "Angel of Death" and murders parked "petters," as in a recent paranoiac murder wave. And the police wag their heads and talk of a "dangerous crank."

It is not easy to diagnose paranoia. Weeks, and even months, of observation may be necessary, for these psychotics are cunning and will conceal their delusions when under suspicion. More than one psychiatrist has released a paranoiac who later committed murder.

The precipitating or exciting cause is to be found in some life situation which released a conflict against which the individual could no longer struggle. Inferior and suspicious, with a fatal flow and an overwhelming desire for fulfillment, the paranoiac personality faces failure. He cannot—because of his egotism—blame himself. He therefore seeks and finds in his environment some situation which he can rationalize as the basis of his frustration. Then, by persecutory ideas and delusions of grandeur, he can find some sort of satisfaction. Freud believes that: "Persecutory paranoia is the means by which a person defends himself against a homosexual impulse which has become too powerful." While it is true that these personalities often have sexual maladjustments as the basis of their psychosis, there are, undoubtedly, many cases not rooted in sex conflicts.

Harry Sulzer was brilliant, but "queer." He knew he was inpopular, but he comforted himself with the thought that people were jealous of his unusual attainments. As a boy he had been seclusive, suspicious, easily irritated by ridicule, and a poor "mixer." He knew but little of sex, and was fond of saying that people made more fuss about it than it was worth. He did not marry until he was thirty, and married then for material rather than romantic reasons.

At thirty-two, Harry suddenly became suspicious of his wife and conceived the idea that she was putting poison in his food. Because of this delusion, he left her. Some months later, he came to see her and threatened to kill her unless she "called off" the detectives whom she had following him. Although she protested her innocence, he would not believe her. A week later he appeared and tried to shoot her, but her outcries brought help before he accomplished his design. The police then sent him to the psychopathic ward for observation.

Although he had told the police that his wife was unfaithful to him, Harry now denied all his accusations and said that all was a mistake. He seemed to be well-oriented in respect to time and space, and he was apparantly free from delusions. His clarity of mind, seeming insight, and general good behavior so

impressed the staff that he was released.

One year later he was arrested after he had killed a prominent public official who—so he claimed—had organized a conspiracy against him. The victim was a man who had once defeated him in a law case, and Harry had never forgiven him, asserting that as his opponent the man had employed unfair means to win his victory.

"Roberts had it in for me. He was not satisfied with giving me a dirty deal in a legal matter we had a couple of years ago,

and he went around spreading lies about me.

"I tried to forget about it, but it was no use. Everywhere I went, I could see people look at me, and I knew Roberts was undermining my reputation. It was easy enough to understand why he did it: I was always a better lawyer than he was, and he was jealous. It got worse as time went on. He got to be assistant district attorney through his politics, and then he began to hound me. I found out that he had detectives on my trail—he told them I was a pervert, out to ruin children.

"I saw there was nothing I could do but leave town. I thought I could make a fresh start somewhere else. But everywhere I went, it was the same story. He got the Masons and the Secret Service to work against me because he knew I could beat him alone. I no sooner got settled than I would have to leave

town because of the lies he told about me.

"I knew there was only one way out. And since it had to be one of us, I finally came back and got him. It's a good thing, too, because he was rotten. I knew it, and he knew I did; that is one reason why he wanted me out of the way. People think I'm crazy because I killed him. If they knew what I really did, they would call me a benefactor of mankind."

Here we have the typical development of a paranoiac's reaction: First, the inferior personality which projects its own weaknesses, and then the slow development of a systematized delusion based on a triviality of truth, the persecutory trend representing the reaction of the ego against the tendency of reality to show the personality in an unflattering light. To give himself an importance not warranted by his unconscious inferiority, the paranoiac forms compensatory delusions of grandeur to explain his persecutory complex. All sorts of plots by important and powerful individuals and organizations conspire to bring about his downfall. Although he is innocent, they spread tales of his immorality—frequently of his "sexual perversion"—and do all in their power to destroy him. For a long time he seeks to evade their clutches, but as the ring of his enemies draws closer about him, he finally attacks them in sheer desperation. His story is logical and convincing, and is often the outgrowth of an innocent incident that he has misinterpreted. Through his systematized delusions he finally achieves a kind of inner peace by creating a fantasy world in which he is as important, as brilliant, and as omniscient as he has always believed himself to be.

Paranoiacs are always dangerous and incurable; they suffer from a disease which lasts a lifetime. Once their delusions become active, they must be incarcerated in an institution, for they constitute a menace to the community. Many personalities of this kind exist and manage to live their lives through without giving active vent to the suspicions that they constantly harbor; some saving grace prevents them from breaking loose. There is, however, no telling when a paranoid personality will slip from its moorings and destroy everything in its path that represents a fancied menace to its security.

#### Organic Psychoses

We know today that injury to the brain does not directly produce a certain type of mental disorder; it removes certain inhibitions and allows fundamental personality tendencies to express themselves. This the author was able to prove some years ago in a study of the personality changes caused by syphilis of the brain. A study of several hundred cases showed that with the same cause—the spirochæte causing brain syphilis—many types of personality disorders were manifest when they developed general paresis, or syphilis of the brain. People who were previously introverts developed a morbid exaggeration of these tendencies, and extroverts showed the reverse.

My observations confirmed other observations in agreeing that organic brain disease seems to act as a release of inhibitions that hold certain personality types in check; disease allows morbid caricatures of the original individuality to appear. A man who has been possessed all his life by the desire to be a great architect suffers, at sixty years of age, hardening of the brain arteries, and he becomes insane; and in his talks, he is deluded by a feeling that he is the world's greatest architect. The brain injury has impaired his judgment and removed any barrier to a fantasy he has carried about all his life. Various types of organic brain disorders illustrate again and again this central principle.

*Encephalitis*, or inflammation of the brain, and sleeping sickness, are exemplified in the following case:

Until he was nine, Tony was a quiet, well-behaved boy. Then he fell ill with fever, saw "double," and seemed to sleep all the time. A month later he became very restless, irritable, and excitable, and frequently he gave way to fits of anger. At times, he would scream and fight, and on one occasion he attacked his elder brother with a knife. Also, although he had formerly

hated relatives' affection, he now took every opportunity to kiss the females of his family and betrayed a sudden interest in sex. At school, his behavior became uncontrollable, and he began to lie and steal. Finally, a policeman caught him skinning a dog alive in an empty lot, and took him to the children's court.

Examination showed that he had a slight paralysis of the left facial muscles. The story of his illness and his abnormal conduct revealed that Tony was the victim of a psychosis, which

followed an undiagnosed attack of "sleeping sickness."

The virus of this disease attacks the mid-brain and often upsets the emotional life completely. Indeed, the entire personality seems to undergo a metamorphosis: model children become savages; they become emotionally unstable, lose all inhibitions, and seem devoid of all moral and social ideas. Their behavior is strikingly similar to the personality changes seen in children after head injury; such youngsters also have explosive outbreaks, threaten to kill those who oppose their wishes, give way to temper tantrums, and destroy furniture and other household articles. They are overactive, unmanageable, and very cruel. Often they get into trouble with the law because of delinquency.

This bears out our principle that brain injury, regardless of its nature, often brings out a reaction that releases hidden personality tendencies. Institutional care, sedatives, and other treatment do a varying amount of good for its victims.

Pressure on the brain, caused by physical injury, may cause serious personality changes:

Daniel Mallory was a cheerful, intelligent young man until he was nineteen. At that time he was struck in the left temple by a baseball. He was unconscious for a few moments and then revived. Several days later he became dull and depressed. For weeks he suffered from agonizing headaches. Later he began to vomit, and his vision became blurred. Slowly he began to deteriorate; his memory failed, he became untidy, and he lost all interest in his environment. He would smile and cry without reason; sometimes he would wet and soil himself.

Examination showed that he was suffering from a tumor of the brain, and he was operated upon. For a time he improved, and he seemed to regain his former personality. But after a year, he again became untidy, depressed, and incoherent. It became evident that the growth had recurred and that he would be hopelessly insane until death rescued him.

The insidious and diverse consequences of *general paresis*, or brain syphilis, are seen in the following cases:

Martin Poole had always been a "shut-in" personality, never caring much about social life of any kind, avoiding people, and finding "his chief pleasure in life in day-dreaming," according to his mother. At twenty-eight, he contracted syphilis but felt perfectly well after the acute stages had passed. Thinking himself free of the disease, he married. At thirty-eight he began to act peculiarly. He thought his friends "could see my disease in my face." He began to worry and became very depressed. One day he drew all the shades in his house, saying there was a gang on the roof who were going to kill him. He began to hear "voices" calling him foul names.

After admission to the asylum, he was dominated by delusions of persecutions, and he heard "voices" threatening him and calling him "pervert." He rambled in his conversation, his memory and judgment were poor, and he constantly reacted to hallucinations.

He was found to be suffering from general paresis. Under treatment, he improved slightly at first, but later began to deteriorate rapidly and died in a convulsion after one year in the hospital.

Here we see again the original personality pattern reproduced in the psychosis. The victim's seclusiveness and suspicious nature led easily into delusions of persecutions. He projected his homosexual desires into accusatory hallucinations. Gradually he became more and more absorbed in his conflicts, until he shut out reality entirely. His escape lay in destroying the psyche that gave him form and essence; and his original personality, liberated by the toxin of syphilis, proved his undoing.

Harry Sargent was always a boaster and a liar, and was easily excited. But his good humor, his wit, and his wide range of interests made him socially popular. He became a go-getter and had considerable success as a salesman. However, at forty-five he had business reverses and lost most of his life savings. Six months later, he became very expansive and went on a spree, splurging recklessly. In two days, he spent four hundred dollars for useless trifles. One morning he arose and washed his hat, his coat, and his trousers. As he wandered about the streets, his appearance and talk were so wild that a policeman took him to Bellevue for observation. When admitted to the asylum, he said he was many times a millionaire and that he came of a noble family. He talked continually and later became restless and confused. He boasted of his enormous strength and of inventions which were going to double his already huge fortune.

Examination showed that he was suffering from brain syphilis. Later, he told the author that he had contracted it twenty years before, and believed himself cured by treatment he had taken.

Syphilis may lie dormant for ten, twenty, or even thirty years after the initial infection has seemingly cleared up; and then it may return in the form of paresis to destroy the individual. Thorough treatment and constant observation for a number of years would avert the middle-life tragedies of recurrent syphilis. Sargent made a recovery under treatment and after two years is still well.

It is interesting to note that these two men, suffering from the same disease, showed entirely different mental reactions. This is, of course, in conformity with our principle that organic disease liberates the original personality and allows it to appear in morbid accentuation in the psychosis. Other brain injuries, such as the changes of old age and arteriosclerosis, substantiate this point of view.

Our final chapter brings us to a consideration of treatment and of how we may develop optimum and wholesome personalities.

#### CHAPTER XIV

# The Quest for Happiness

## Where We Must Begin

This is the question all human beings ask

themselves throughout their lives, consciously or unconsciously. Some write letters to newspaper columnists who give sage opinions on love, health, marriage, and all life's problems; some consult their clergyman; others talk it over with their parents, relatives, and friends; and many come sooner or later to the family doctor or to the psychiatrist.

They search with the faith of children, but most of them go away with the broken illusions and the bowed shoulders of old age. Often, the reason is that they come too late, but more frequently it is that they come expecting to hear a magic formula whose repeated observance will work cabbalistic wonders. They cannot grasp the fundamental fact that there is no high-road to happiness; that the way lies through a jungle, and that the path is beset by many terrors which may cause them to retrace their steps to the only universally happy period—man's life-infancy; and as adults, they struggle by fantasy to find peace in that "never-never land."

No one can fix rules-of-thumb or reiterate "don'ts" to bring anyone else the birthright of human beings—the wholesome personality, the good character, and the achievement of happiness. There are, however, fixed principles through which men may achieve balance and adjustment. They are the generalizations through which each individual, as the product of his hereditary capabilities and the environment to which he has reacted, may see with some clarity the proper approach to his goal—the balanced personality and the good life.

Now it is principally because many parents proceed upon aphorisms like "Spare the rod and spoil the child," that there are so many people in ferment, in disharmony, and dissatisfied with existence. For children are individuals. If we can inflict corporal punishment on a boy with desirable results, can we be sure that the same procedure will be equally effective with his sister? Are we certain that she does not respond more to *verbal* blame?

The questions we must ask ourselves are:

First: Can we forestall the development of unfavorable mental attitudes?

Second: How can we recognize the incipient or early stages of maladjustment?

Third: How can we prevent its progression into mental ill health?

Fourth: What treatments may be used for the victims of maladjustment, mental disorders, and failing and wrecked personality?

Our answer to the first question is Yes. Prevention is the theme of our symphony. Upon its success hangs the hope of the new psychiatry, which is the keystone in the arch of mental hygiene. Medicine has come to realize that an ounce of prevention is worth tons of cure. We try today to isolate, by studies of their constitution, those who are most likely to fall ill of certain diseases, and to safeguard them while they are in health, rather than to wait until they show signs of the disease.

In our schools, we take the underweight and the undernourished children and put them into open-air classes; we treat them as if they were tuberculous, although they have no complaints and function well, physically and mentally. Medical examiners make periodic visits, and as a result of their findings, diseased tonsils and decayed teeth are removed, because they are sources of potential danger. Also, children are taught health habits, such as the care of teeth and skin and bowels. We are indeed imbued with the programmatic ideal of furnishing the young with a healthy body with which to meet the world. And the ideal turns upon the prevention of disease, since chronic disorders for the most part do not yield to treatment. At best, the physician repairs the body machine; he cannot replace worn-out parts.

Likewise, the ideal of mental hygiene is to do for the mind, what is being done universally for the body; it aims to keep a healthy mind housed in a healthy physique. As a movement, mental hygiene owes its origin to Clifford W. This remarkable personality was once an inmate of various private and public hospitals for mental disorders. As a result of his disagreeable experience, which he describes in his autobiographical work "A Mind That Found Itself." he was stimulated to start the movement which is today doing more good than any other agency in preparing people for the happy life. He founded the National Committee for Mental Hygiene and is still its secretary; today there are many state and city organizations working under the national committee and carrying on their splendid program. Its aim is to prevent the formation of unhealthy attitudes of body and mind, to avoid the building up in children of faulty life patterns; in short, to forestall maladjustment and failure by teaching parents and children the ways and means of developing balanced personality. By education and propaganda it strives to make known popularly the early symptoms of maladaptation; and it endeavors to rehabilitate those who have already succumbed to a faulty and ill-controlled environment.

Mental hygiene is the legatee of all the accumulated knowledge of the social and psychological sciences. Everything is grist to its mill, and it uses the combined wisdom of medicine, biology, ethics, criminology, sociology, psychology, psychoanalysis, and psychiatry to accomplish its purpose. It is dynamic in its essence and sees failure of adjustment as the complex of many factors; it strives to isolate and correct them, and then reorients the personality along positive lines. It recognizes the abnormal and the neurotic and the insane as merely morbid exaggerations of the normal and the sane. It sees society as a vast laboratory in which the unsuccessful experiments are the result of ignorance; and by retracing the steps of the human equation and balancing its proportions, it often causes the flaws to work out. Summed up, mental hygiene teaches the individual to resolve or avoid dangerous inner conflicts by modifying either his own tendencies, desires and instincts, or by reshaping the environment that is in disharmony with his emotional or intellectual life.

To serve the ends of prevention and cure, there are enlisted such agencies as child guidance clinics where problem youngsters are studied and adjusted. Workers trained in sociology and psychiatry do intensive case work, carry the program into the home, and strive for parent education; visiting teachers, or other workers in the schools, try to bring about adjustment in cases of minor importance. Child guidance clinics are the heart of many communities' efforts to insure mental health in every youngster; designed at first to investigate and treat juvenile offenders and cases referred by social agencies, their aim is now to help the entire

population of the pre-school and the school age. These organizations and other factors have contributed especially to parents' interest in how to bring up children properly.

From the body of knowledge that has come to us from the various sciences, the author has derived a few principles that may be observed with advantage in helping children to develop normally.

## Forming the Life-Patterns in Children

Balanced personality is a symphony in its swelling simplicity and in the integration of its theme, which is repeated over and over again. Great music is a blending of primary and secondary themes; so is the adjusted individual. But although one is not acutely aware of smoothly harmonized traits, yet faulty orchestration, misplaced phrasing, and poor conduct bring discord, and he hears the symphony that was a personality transformed into jarring, clashing discord. Environment is the composer, who takes the notes of a hereditary constitution and by variation and repetition builds a composition: sometimes it is major, serene, and simple; sometimes a melancholy minor. Often it is a discordant, hopeless dissonance.

To the home and to the parent belongs the responsibility of producing the proper blending, the interweaving of primary and secondary themes, the phrasing and interpretation of the child's early life experiences which contribute to his ultimate personality. Individuality is a series of integrated patterns, and the manner and success of their integration is the basis of future happiness. The simplest of these patterns is called forth at birth; restriction of its movements, loss of support, loud noises, bring out the pattern of crying. The nutritive and excretory patterns are socialized by the mother, and later, the father and other factors in the environment take part in the discipline and

conditioning. But ignorance upon the part of the parents causes the development of unfavorable traits, as when mothers feed their child every time he cries and he therefore, perhaps, develops into a petulant, spoiled adult.

Other factors in the environment may bring about similar undesirable results in a child, such as the excessive fear reaction in the following case:

Willie was told to leave the cookie jar alone. But when his mother left the room, his desire got the better of him. However, as he took up the jar, there came a ring of the doorbell. Frightened by the noise, Willie dropped the jar, which smashed into bits; and he began to tremble and cry. For weeks thereafter, Willie would not play in the same room where a glass jar stood on a table. In his mind, there had been a "short circuiting": the connection of breaking glass with the idea of punishment for disobeying his mother in picking up the forbidden object. Although the fear had been due to the noise of the bell ringing and the breaking glass, it was associated with, and was thereafter aroused by, the glass jar alone.

A psychologist advised breaking the boy of his unwarranted fear, for upon such bases we may form timid, apprehensive personalities. This was done by a process of unconditioning. He was made to eat in the same room with a glass jar, and every day it was moved nearer his table. At length, he was made to put his hand upon the jar, at the same time he was fed. Thus, by the gradual association of the irrationally feared object with a pleasant stimulus—the food—the apprehension completely disappeared; an undesirable pattern was broken down. The result was achieved by using a normal activity of the child instead of by petting or scolding, which would only have made things worse.

Stupid emotional attitudes of parents such as that of petting, fondling, and oversolicitude, condition the child unfavorably. A youngster who learns that the least symptom of illness will bring tenderness and get him anything he wants from his mother, becomes the whimpering and whin-

ing type who controls his environment by the use of these traits; he knows in advance that if he complains of a headache, his mother will become all solicitude and will not leave him for a moment.

An unwise delight in a child's achievements is another source of the building up of bad life-patterns. "Mother, tell father the clever thing I said this morning," urges Johnny, aged six. The youngster has learned a new attention-gaining mechanism, is on his way to becoming conceited, and in later life turns out to be a "show-off." Again, children are sometimes retarded mentally because they develop bad habit-patterns as infants, which patterns become so fixed that they cannot learn to walk and talk at the proper time. Other children suffer because of poor home training; they never grow up. They remain childish because they have inferred that by being so they can better control their environment and secure pleasure. A counteractive of such a bad beginning is suggested by the kindergarten movement, which has taught us among other things that toys should be such as the child will learn to operate with his hands and employ in a game; they will facilitate the development of qualities like imagination.

Among the principles that should guide parents in child training, perhaps the following are especially worthy of continued attention:

- (1) Denial must be resorted to continually, since the formation of inhibitions is one of the bases of good character. Denial should be accompanied by direction—by the suggestion of "something else to do"—when possible.
- (2) A child should not be humored or submitted to because he cries and rages. When he learns thus to control his parents, attempts at discipline will be futile.

- (3) Petting, pampering, and oversolicitude spoil children thoroughly. Parents should not attempt to live vicariously in their offspring.
- (4) The browbeating and bulldozing of the young destroys their initiative, makes for inferiority attitudes, and even lays the foundation for mental disorders.
- (5) Fantasy should be encouraged in children, but they must be made to realize the borders between fantasy and reality. Pretense should be condoned only so far as it is part of a child's play with companions. Make-believe should remain *make-believe* always.
- (6) The young should be extraverted. They should have a wide range of interests and should have playmates. Social consciousness is the core of adjustment and happiness.
- (7) Symptoms of mental as well as physical disease should be learned by parents so that they will be recognized when they appear. Flight from reality, personality deviations, and the formation of generally undesirable traits should be corrected at once.
- (8) Parents should not bring up children as they themselves were brought up. Some intelligent *system* of training should be observed. No matter how much may be said for grandparents, it is always certain that they made serious errors.

## Maladjustment and Readjustment

What to do, when to do it and how to go about it, are the questions which slight or serious maladjustment and unhappiness arouse in us. When the preventive program has not been carried out, or has failed because of unusual factors, we are faced by threatened breakdowns. Individuals struggling to compromise with their environment, or "fail-

ures" who are ready to renounce reality, turn their faces from the sun of the present and flee into the twilight of the past, to childhood, where they can find happiness again.

To help these various personalities in distress, we must first understand them; and that is possible only by a diagnosis which takes account of the original make-up of the individual, the resources with which he has to react, and the specific situations or the environment to which he has failed to react adequately. Accurate diagnosis is essential for successful treatment. Often two very different conditions give the same symptoms, and they may be misinterpreted even by the eye of the expert. For example, a man may become indifferent and slovenly, and complain of weakness, dullness, and insufficiency; and to all appearances he is suffering from a neurasthenia. Yet the treatment, often employed successfully, fails. An examination of the blood -which should have been made before-is now made, and it reveals that our patient is in the early stages of general paresis, which simulates neurasthenia. Under appropriate treatment he returns to normal.

In the technique involved in making the diagnosis, first in importance is the history. Through this we build up a picture of the setting out of which the individual and his difficulties arose, and we are thus enabled to evaluate him critically—that is, according to the origin and the meaning of his symptoms. Our questions first concern his family, since stock and race often establish certain predispositions and hereditary bases for failure. Then an analysis of his environment or social heredity is made. Is there any record of nervous disorders in his immediate family or in collateral lines? What is the character of his home, of his social group, of their religions and intellectual learning? And the possibility of hereditary disease, such as syphilis, likewise is determined. All this, then, is the family history

and exercises a molding influence upon the patient's character formation and behavior patterns.

Next comes the personal history. Was his birth normal or instrumental? We must know that, since a forced labor sometimes causes head injuries which may affect development. Then—did he crawl, sit up, walk and talk at the usual time, or was he backward as a child? What child-hood diseases—measles, croup, scarlet fever, and so on—did he have? Did he manifest as a child any peculiarities such as undue nervousness, temper tantrums, or delay in learning to control his bowels and bladder?

But the core of the history is what we learn of his *previous* personality. A careful study of the facts obtained from this part of the inquiry will often be the answer to the question of how to clear up undesirable traits. The author uses a combination of questions and observations called the "physical-psychiatric" examination:

- (1) Observe the general behavior and attitude of the patient during the consultation; note his frankness or reticence in discussing general topics.
- (2) Ask him to estimate his size, strength, intelligence, and ability in group athletics.
- (3) What are his relationships with other boys? Does he get on with them? If not, what is *his* reason for the discord?
- (4) Ask him to estimate his position in the family and his attitude towards the other members of the household.
- (5) Fantasy life: How does he accept reality? Does he like to day-dream about the "happy past," or does he yearn for the future? What is the extent and the theme of his day-dreams? What are the frequency and central ideas of his night dreams? Has he had any unusual mental experiences?

(6) Sex life: Does he accept or reject his own sex? To what degree? Does he believe that "girls get the best of it," and envy his sisters? What has been his pubertal experience, and how did he react to it? (This period, we have seen, is the one most fraught with danger for the personality; delinquency, neuroses, and psychoses are most often uncovered and begun at this stage of development.) What have been his sex experiences, and how does he feel about them? Does he expect to marry?

Then an account is taken of the diseases he has had in his past life—pneumonia, typhoid, tuberculosis, and so forth—and these are related to his physical condition. A complete physical examination from head to foot, with special emphasis on the neurologic side—the determination of the normalcy of the reflexes, the muscle and nerve functions, and the condition of the sensory organs—comes next, and it serves to eliminate or prove the existence of an organic basis for the mental disorder. Furthermore, laboratory tests of urine and blood; the X-Ray; the Wasserman test for syphilis; sputum analysis, and other procedures are resorted to when they might explain the ailment. "Positive" results may reveal a physical clue to the personality disturbance.

This inquiry having revealed the sum total of the individual's endowment and reactive forces, it becomes necessary now to study the specific situation which precipitated the trouble. Trained observers, like social psychiatric case workers, can best sum up the victim's environment and search out the causes of conflict therein. When these are lacking, an intelligent parent or brother or sister can furnish the picture of the life situation producing the maladjustment. Then, once the background or setting is clear, an analysis of the symptoms betokening threatened personality failure, or indicating actual defeat of the individual in his

struggle for adjustment, is made. Our survey has shown that conflict is the basis of all abnormal behavior and conduct; and we must determine which must be altered by treatment—the tabooed desires of the individual or the life situation which has brought the conflict to a disastrous head.

Now readjustment looks towards a physical basis for correcting maladjustment as a matter of routine and as a practical necessity. We have seen how in the early stages of general paresis there may be every indication that we are dealing with neurasthenia, and that no amount of mental treatment will do this type of individual any good; but that the use of salvarsan, or the "malaria" therapy, will often accomplish a complete metamorphosis. Thus, physical treatment is highly important.

A student suffered from a chronic disease which threatened to scar her face. She became depressed and entertained ideas that she was very unpopular—that no man would even look at her again. She refused to go out socially. This continued for about a year. Then she sought out a skin specialist, who cured the condition by X-Ray treatment. In a short time, this lonely and depressed personality, who had withdrawn from all social contacts, became a happy, vivacious girl whose charm and wit entertained all who met her. Her inferiority and feelings of "not being wanted" disappeared with the skin rash.

Betty Lane was a twenty-year-old girl who blushed, stammered, was awkward, and never went to parties because she was sure "boys don't like me." She came to see me because of nervousness and feelings of depression.

Physically there was nothing wrong with her. But she admitted that her hooked nose was a source of embarrassment. Hence, it was no wonder that when a plastic surgeon gave her an aquiline nose, her personality was changed completely. She became well-poised, did not stammer or blush when spoken to, lost her nervousness, and became a social butterfly with many admirers. Indeed, within six months after her nose operation she was engaged to be married!

The various gland disorders, we have seen, may give rise to a variety of complaints that may be assumed to be neuroses. Insufficient adrenal cortex, resulting in a feeling of inadequacy and inferiority, can not be cured by psychotherapy; the feeding of *cortin* is needed to remove the symptoms. Also, abscessed teeth, infected tonsils, and other physical defects should be corrected before anything else is done; even in cases of purely psychic origin, they contribute to the burden of the individual and make adjustment more difficult.

## The Technique of Psychotherapy

As soon as we are sure that the body is in a state of good health, we turn to the chief weapon used in readjustment—psychotherapy. By this term we sum up the various techniques of a psychological nature commonly employed in restoring the balance to deviated personalities.

The psychotherapist is principally the psychiatrist, since he is best fitted to understand the scientific aspect of conflict and compromise and of the attack upon or retreat from reality which marks the behavior of the individual netted by life. But intelligent laymen can and do use psychotherapy; and in solving less difficult problems, they may be just as successful as the psychiatrist. Ministers, priests, social workers, teachers and friends are frequent psychotherapists, although they themselves would not recognize that their counsel merits that name. The old "family doctor," now rapidly becoming a happy memory, owed a good deal of his success to his use of psychotherapy, although he would have snorted at the imputation that he was dealing in anything but the physical cure of disease.

Whether psychiatrist, general practitioner, or layman, the most important quality such a "healer" must possess is the equivalent of a "bedside manner." Patients respond

keenly to an intelligent and sympathetic listener to their troubles; and, so encouraged, they will "tell all" and feel the better for it. To an impatient and critical psychotherapist, they cannot open up. The best psychotherapist the author knows is a general practitioner whose attitude is such that hopeless individuals crowd his consultation room, leaving it with the feeling that life is worthwhile, although nothing much has yet been done for them. Indeed, I have seen men and women who have clung for years to the thread of his personality.

Psychotherapy attempts to bring unconscious conflicts out into the open and then to resolve them. Sometimes it attempts to strengthen the process of repression and to push the conflict—homosexual tendencies—deeper into the unconscious, where it will not give rise to such distressing symptoms. But the techniques and methods of treatment have first an obstacle to hurdle; and that barrier is the patient's resistance. Resistance is often unconscious, but it is none the less real and is a serious threat to success; it must be broken down before we can go very far with the process of readjustment. Essentially, it is a concept of psychoanalysis; but the intelligent and even unintelligent layman recognizes daily this characteristic in the maladjusted. A certain mother tells of her shiftless son: "Herbert goes to look for job, but prays to God that he won't get one." Obviously one cannot help a patient to recover as long as he consciously or unconsciously wants to remain sick.

Drug addicts often behave like neurotics. The author has seen men who have gone to a magistrate and *voluntarily* asked to be committed to prison to "cure" their addiction; and yet when they were searched on arrival at the hospital, not infrequently did we find drugs secreted in some hidden pocket: they had been placed there by the habitué for the

dread day when the craving and his suffering became too intense. He knew, of course, that just one dose would nullify all the treatment. In fact, even months after the craving has disappeared, "junkies" go back to their habit; not because they need it, but because reality is unpleasant, and they want the fantasies and the dreams that will bring them transient happiness.

Conversely, the neurotic is often like the drug addict. He says he wants to be cured, that his suffering is more than he can bear; but, deep down in his unconscious, he finds satisfaction in the infantile behavior which his neurosis condones. Sometimes, the symptoms are even self-inflicted punishment, so that he may harbor and enjoy some tabooed desire in his unconscious. This explains why he resists in many more or less subtle ways the removal of the condition which gives him certain satisfactions. An individual who enjoys ill-health and complains of feeling better will not give up his abnormal comforts without a struggle.

Resistance is shown in the absolute refusal of many to seek advice; others come to the psychiatrist and arrange for treatment but then fail to return. Some show it in coming late for their appointment and in breaking engagements on various pretexts; still others become discouraged when their problem does not disappear as if by a miracle, or they desert their physician as soon as he seems to be getting at the root of their problem.

A friend of the author who has a marked mother-fixation and is highly neurotic, blandly admits the truth of the diagnosis but refuses to accept advice because "psychoanalysis drove my brother insane." Another patient in a burst of frankness exclaims: "I sometimes think how unhappy I would be if I didn't have something to complain about!"

The first task of the psychotherapist is to break down the individual's resistance. This is best accomplished by

forcing the patient to face reality; he must be shown that his evasions, his failure to keep engagements, or his desire to quit treatment, are part of his disease, and that if he is really sincere in his desire to get well, he must coöperate.

In simple conflicts and minor personality disturbances, the technique exhibited in the admonition "it's your imagination; stop thinking about it" is sometimes effective. technique is mostly employed by faith healers, hypnotists, well-meaning friends, and amateur psychotherapists. think to dismiss an inner conflict by convincing the sufferer that he is imagining his mental troubles. Sometimes they actually do succeed in strengthening repression and in pushing the conflict down further into the unconscious, where it ceases to trouble the victim. This is done by persuading the individual that "there is really nothing wrong with you. Just forget it." To this method may be added the use of suggestion, which seems to work so well with hysterics; the use of religion, with the idea that sufficient faith will heal anything; and the ideas that underlie Christian Science. Also, encouragement and reassurance will help many people who suffer from inferiority; a social program for the lonely and friendless will overcome their early difficulties in adjusting; and the "explaining away" of a patient's growing fear of failure may be successful if you can exhort or sting or inspire him into action by appealing to something like pride of family, or traditions that are important to him.

These are short cuts which even the psychiatrist may employ. But they are not techniques of choice; for sooner or later, the conflict becomes intense again, and the neurotic symptoms distress the victim with the same or greater disagreeableness. If we use those methods at all, it is because time does not permit, or the number of patients is too great—for example, in a college mental hygiene service with

several hundred students on its roster—for the longer but more successful techniques.

An excellent technique is found in mental catharsis, which is the "talking-it-out" process. The value of the confessional to sympathetic ears is classical in use and is well known for the peace of mind it brings—at least for the time being. It is commonplace that people in trouble will unbosom themselves to a friend and will go away saying: "It has made me feel so much better just to talk to you." Of course it has! The pouring out of thoughts that burden and the consequent blowing off of psychic steam are a safety valve that keeps the extrovert sane. But the introvert who keeps his own counsel and never lets anyone know what he is thinking, becomes more and more morbid. This type does well to use alcohol in moderate quantities, since it loosens his inhibitions and permits him to tell the world what is "on his chest." A patient of the author goes on periodic "drunks" and always feels better immediately after; he does not know-I have seen him on one of these occasions—that it is because he becomes highly social and unburdens himself by confiding, even to strangers, his lifelong frustrations.

Catharsis is effected, of course, in diagnosis, which explores the unconscious and brings out thinly repressed material which the patient himself is surprised to hear. Freud's first patient, from whom he obtained the clue that led to his development of psychoanalysis, practically cured herself by sitting and talking interminably. Indeed, the reputation of some of our best practitioners is predicated on their ability as good listeners; furnishing a good sounding board for the patient's woes, and a sympathetic manner, they are successful with the mild neurotics whose surface conflicts are soothed by catharsis.

Psychoanalysis, as we know, uses mental catharsis as a diagnostic technique to elicit the mass of apparently unrelated and trivial material that helps to build up a picture of childhood. Once the "amnesia" covering those long-repressed memories is lifted, a coherent explanation of adult conduct can often be made in terms of unsuspected purposes, wishes, fears, frustrations, tabooes, and hopes.

Psychoanalysts believe that, by bringing the conflicts up from the depths of the unconscious into the light of day and reason, and by explaining their nature to the sufferer, the fixated energy is released and improvement results. treatment technique necessitates first, the breaking down of the patient's resistance and the instilling within him of a sincere desire to get well; second, the achievement of transference. This means that, beginning with a "liking," they finally come to look at the psychiatrist with the ideal regard that they had for their father or mother. Indeed, transference often becomes so strong that the patient identifies the healer with God. Such sufferers are swayed absolutely by his dictates, regard his every word as divine wisdom, and are perfectly happy as long as they are under his care. They talk about him to anyone who will listen, and insist that their friends seek his advice. Many will drag unwitting people to him, promising to pay their medical bills, if they will only go and see for themselves "how marvelous he really is."

However, transference is not, and should not be, the stopping place for a cure. Through it the analyst only acquires the confidence and willingness of the patients to carry out the requisites of treatment. But once the cure is accomplished, the transference must be broken and redirected to some normal love object or to some interest or vocation.

The patient must learn to shift for himself; for, as Ibsen has said,

The strongest man is he who stands most alone.

Often it is difficult to break down this useful attachment, but it can be done if the patient will realize that it is just as bad for her to have a fixation upon the analyst as it was to have it upon her father.

Psychoanalysis as a treatment requires an hour daily, five times a week, for from six months to three years. A so-called "short" analysis, as used by Anna Freud in mild cases in children, may take only a few sessions or a number of weeks; but most cases where analysis is necessary do not fall into this class. It is obvious that it would be impossible to describe fully—for our purposes—the procedure involved. Instead, we shall sketch the usual steps involved.

First there is the period of confessional, in which the subject "tells all." This brings out the material in the conscious, and a period of resistance follows. The patient, if prodded to go further, insists that there is nothing more to tell; his mind is a blank. But finally, his protests are broken down, he does not evade his appointments or try to break off the analyses; his resistance lessens, and he begins to recollect. Now come fragments from childhood, memories long-forgotten, unsuspected wishes which surprise the patient, and a good deal of other material which is grist to the analyst's mill. And, as the transference is built up, the patient confides more and more. By association—a technique which determines a significance for seemingly meaningless words, actions, wishes, fears—and by dream analysis, an interpretation of the source and nature of the conflict determining the neurosis, is made.

That the conflict is frequently based upon instinctive desires, sexual and egoistic, which are socially tabooed, is a truism confirmed by the analysts' daily experience. Clothed in disguises or making use of symbols to hide their real identity, those instinctive desires in the unconscious are brought into the conscious world, and their hidden meaning is unveiled; faults in the psychosexual development, such as parent fixations, frustrations in love, and the wounds to the unfulfilled ego, are revealed.

Thus, with infinite patience, the analyst brings the patient to a realization of what has been going on within him. And in the end, through the strength of transference, and perhaps by the suggestion implicit in the technique, the sufferer is brought back from his retreat into the fantasy life of childhood, and he learns to face the facts. This facing of reality in place of flight is essential; once this attitude is achieved, the recovery has begun. The final step is the breaking of the transference; patients will often object and say they cannot possibly get along without the help of the analyst. But they must be made to understand that they cannot use a crutch forever. At first, they will find it difficult to walk alone; but in the end, self-reliance comes and the cure is accomplished.

In substance, that is the technique of psychoanalysis as treatment. It should be used only in highly selected cases of neuroses and only where it seems to be fairly certain that the patient is prepared to stand the ordeal of time, and has the courage to face the painful reality that will be unveiled to him. Much harm is done when an analysis is halted before it is complete; the sufferer is adrift, and like a rudderless ship he is bound to founder.

One of the reasons for failures in analysis is that the technique is employed by incompetents; these are the sources of the catastrophes wrongly attributed to orthodox psychoanalysis. In the author's opinion, analysis should be limited to the treatment of the neuroses; in the psychoses it is not only useless but also dangerous, except as it understands the meaning of the mechanisms of abnormal behavior and the content of delusions, hallucinations, and other perversions of normal thinking. In particular, psychoanalysis finds a sphere of usefulness in the preventive program as a discipline to aid in the normal psychosexual development. With the research now going on, and the discoveries bound to come out of it, as well as the standardization of technique, psychoanalysis is bound to become the outstanding psychotherapeutic method. Guided by its dynamic principles, it gives an interpretation of human behavior in terms of purpose, such as none of the so-called orthodox psychologies can approach. In its development and spread lies much of our hope of avoiding future mental ills of mankind.

## Reëducating the Patient

Reconstruction, or reëducation, consists of a frank discussion with the patient of his problems after a sociopsychological study. The life situation is analyzed to find what is the immediate cause of his failure, and attempts to remove the irritant are advised. Often it is necessary to remove the victim from a home in which strife is constant and is the basis for a neurosis or delinquent behavior. It has been found that so-called problem children often completely give up their abnormal patterns of behavior when removed to foster homes where care and understanding according to scientific supervision are given them. New objectives are planned for them, new goods are envisioned, a new world and ideals beckon; in short, socialization is attempted and often achieved. But it is not always possible to secure relief merely by changing the environment. This is

because the difficulty lies within the individual himself and cannot be dismissed by his taking a vacation, or by a change of scene such as a trip to Europe. People who try to run away from themselves always wake up to find the ghost of their conflict nudging their elbow and whispering in their ear.

Frequently, however, especially for the insane, the environment must be changed. And this means *safeguarding treatment*, or institutional care. It is resorted to for any or all of three reasons:

- (1) The patient is suicidal and will do away with himself unless observed constantly. The depressed psychotics form the bulk of this class. In addition, they require care—often even forced feeding, which can be effected only in a hospital equipped to handle the insane.
- (2) The patient is a menace to the community. The schizophrenic and paranoiac are the members of this group. Because of their delusions of persecution, they may break out at any time and commit crimes of violence. In addition, they are slovenly, difficult to care for, need forced feeding at times, and are given to impulsive behavior: all of which makes it imperative to hospitalize them.
- (3) The removal from the home to an institution gives the serious mental case much more chance to improve, and even to recover.

Within the walls of modern hospitals for the insane, there is a complete program aimed at the improvement and reëducation of the physically sick. To begin with, these institutions are spread over a considerable acreage, upon which a complete community lives. There are shops of all kinds, such as plumbing, electrical and carpentry establishments, manned by improved or convalescent patients. All sorts of opportunities which approximate life situations are

given to the victims of mental disease under controlled conditions so that their energies may be redirected into familiar channels and they may be prepared for reentry into normal life.

Such is one of the final stages in adjustment. Upon admission, the patient is isolated and studied to determine his mental and physical condition. He is given an adequate diet, his elimination is taken care of, and tonics or glandular extracts are given to him when necessary. Infections of the teeth, tonsils, and other organs are treated. Rest, quiet, and constant nursing care are employed as suggested by the condition of the sufferer. Also, the psychiatrist attempts to "draw him out" and to determine the origin and development of his difficulties. From the picture as he then sees it, a program best suited to his individual needs is laid out, the common procedures of which are:

Hydrotherapy: Baths of various types are employed which act to sedate maniacal and "disturbed" patients. The temperature is kept constant and a continual flow of water is maintained. In some cases streams of water at a certain temperature and under increased pressure are used to shower overactive patients and so quiet them. Also, packs, both cold and warm, are employed; the patient is wrapped in sheets wrung out in warm or cold water, and is then well covered by blankets. Thus he may rest for an hour or two.

Physiotherapy: Various 'types of electrical treatments, such as high frequency, Faradic and galvanic currents, and the ultra-violet ray, are used to quiet highly nervous patients and to stimulate those in need of building up.

Physical Education: The better equipped hospitals have of recent years employed physical directors, both men and women, to institute activity programs designed to restore and maintain bodily health. Such a program keeps the patients fit, saves them from succumbing easily to diseases which in better condition they can survive, and gets them off "on the right foot" when they recover and go back into society. The competition helps to draw them out, teaches them the value of teamwork, and helps ultimately towards social adjustment.

Occupational Therapy: Patients are trained in handicraft, and under instruction they learn to weave baskets, to make pottery, and the like. This activity is often successful in arousing and keeping up the interests of many who have slumped into dullness and apathy. Under this stimulus, patients sometimes show surprising aptitudes, and through a new-found pride over something they themselves have made, they are brought back into contact with reality.

None of these procedures, however, achieves miracles. But infinite patience in their practice is undoubtedly a factor in the improvement and early recovery of many; they are invaluable adjuncts to psychiatric treatment and are an indissoluble part of the theory of hospitalization as a means of bringing about personality metamorphosis.

The parole system is another link in the chain of redemption that has been forged in recent years. A careful social psychiatric study is made of the home conditions into which patients who are considered fit to have a trial in society again, will go. A specially trained case worker tries to eliminate those factors in the environment which made for the breakdown. The parents and relatives are instructed in their part in the mental hygiene program, home irritants are removed, and congenial work for the patient under sympathetic supervision is arranged for. In addition, a follow-up contact is maintained for at least one year, and the parolee visits a psychiatrist at definite intervals to have

determined the quality of his adjustment. This system has salvaged many personalities; under this observation, bad tendencies can be checked in their incipiency and the patient saved from backsliding. Some institutions have as many as six or seven hundred patients under the care of their parole service.

# Mental Hygiene and the Future

Modern hospitals for the insane represent a great advance over those of fifty to seventy-five years ago. Patients are treated as mentally sick, not as wicked or bewitched; they are handled with kindness and understanding instead of being shut up as dangerous nuisances to the community and of having their death hailed with relief by their relatives. Some twenty per cent recover in state hospitals for the insane; another twenty per cent show improvement within one year of residence. But much must be done before we can say that society is doing all it can to aid these unfortunates. Most of our state institutions are overcrowded in outmoded and even unsafe buildings, and are attended by too few nurses and physi-The author was a member of the staff of a hospital for the insane which had about one physician for every five or six hundred patients!

The tide of madness rises daily. Only by instituting mental hygiene in the schools, by studying the psychopathology of childhood, and by making compulsory and standardized neuropsychiatric examinations of *all* children at the pre-school age, can we hope to stem it. Such procedures would insure the detection of predisposed personalities, who would be segregated for prompt treatment; and adjustment could be obtained.

Civilization now faces a crisis. There is a race between biological evolution and education; if the victory is to the former, catastrophe and oblivion face our culture. The mass of protoplasm called the infant, characterized by strivings, drives, and undifferentiated and asocial desires, is born into a world demanding a rapid and complex adjustment as the price of happiness. And this biological laissez faire does not permit many to adapt as rapidly and as completely as desired, and they are then doomed to destruction. Hence, since it is obvious that we cannot speed the biologic process—it is most often beyond our control, whatever the eugenists say—it remains for education, in which the psychiatrist must lead the way, to find ways and means of increasing the adaptative powers of the total personality and of adjusting the environment, so that the clash between the ego and reality may not have the disastrous effects it has had in the past.

# Conclusion

Our search through the many fields of the science of human life has disclosed to us that personality and character are the integration of many and diverse forces. No longer may we with intelligent assurance look upon personality as a purely psychological or a purely sociological manifestation; we must rather see it with the eyes of all the sciences. And we must see, too, that heredity and environment, those forces that make human life what it is, are as the faces of Janus, seeing both past and future.

If happiness is the goal of all life—and we may assume that it is—modern psychiatry can point the way to its achievement by its knowledge of the development of the balanced and wholesome personality. But whether this ideal is realized depends not upon any one individual, nor upon any group of individuals; it must depend upon society as a whole. No thinking man can be indifferent or complacent while life is bringing any of his fellows to agony; nor can society purchase majority happiness at the expense of minority misery. All shall take part in the labor and in the reward: society as a whole shall follow the program of mental hygiene that is implicit in the new psychiatry; and each member of society shall anticipate and consummate the program in fashioning his life by that ancient and wise injunction:

"Know thyself."



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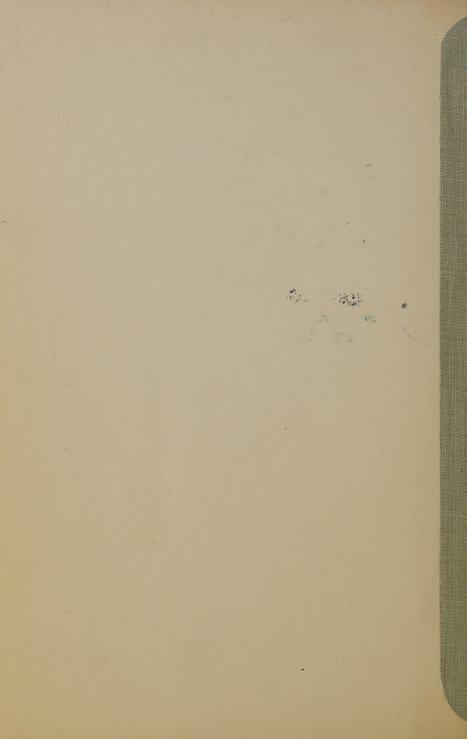
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